CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, November 16, 1905.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

The following Plans (P.), Specifications (S.), and Bidding Sheets (B. S.) may be seen at the office of The Engineering News Publishing Co., 220 Broadway, New York:

Bids close.	Work.	Place.	On file.	See issue.
Nov.				
18	Underground cable	Phila., Pa.	S.	10-26
18	Wireless telegraph	Wash., D. C.	S.	11-16
20	Electric plant, &c.	Gilroy, Cal.	S.	11-16
*24	Dredging	Philadelphia, Pa.	S.	11-9
25	Drainage canals	N. Orleans, La.	S.	10-26
Dec.				
*2	Drill hall	Cheyenne, Wyo.	P. & S.	11-9
2	Concrete wall	Key West, Fla.	S.	10-19
2	Concrete wall	Cuba	S.	10-19
*5	Dam	Billings, Mont	P. & S.	9-14
9	Electric elevator	Norfolk, Va.	S.	11-16
*	Steel rolled beams	New York	S.	10-12
Jan.				
*2	Water system	Manila	P. & S.	9-21
*12	Sewer system	Manila	P. & S.	9-21

*Work advertised in Engineering News.

NOTE—We are desirous of securing specifications and bidding sheets (and plans when not too bulky) of pending work for file in our New York office for the benefit of contractors or others who may be interested in the work. If more sets than one are sent us we shall be pleased to distribute these to contractors who ask for them. When the work is advertised in Engineering News a note that the plans are filed with us will be added to the advertisement without cost.

LIST OF CONTRACTS PENDING.

Bids close. Work. Place. See issue.

LIGHT, HEAT AND POWER PLANTS.

Nov. 20. Electric plant, etc., Gilroy, Cal. ..... Nov. 16
Nov. 20. Electric lamps, New York, N. Y. ..... Nov. 16
Nov. 27. Electric light plant, Belle Plaine, Minn. Nov. 16
Dec. 2. Lighting system, Ft. D. A. Russell, Wyo. ... Nov. 2
Advertised, Eng. News, Nov. 2 to 23.
Dec. 2. Water power, Porto Rico ..... Aug. 17
Advertised, Eng. News, Aug 17 to Sept 14.
Dec. 16. Electric plant, Brazil ..... Nov. 9
Dec. 18. Gas plant, Winnipeg, Man. ..... Nov. 16
Advertised, Eng. News, Nov. 16 and 23.

BRIDGES.

Nov. 20. Bridge, Memphis, Tenn. ..... Oct. 26
Nov. 20. Bridge, Doylestown, Pa. ..... Nov. 2
Nov. 20. Bridges, steel, Carthage, Mo. ..... Nov. 16
Nov. 21. Bridges, St. Charles, Mo. ..... Nov. 9
Nov. 22. Bridge, Mount Idaho, Idaho ..... Nov. 16
Nov. 24. Drawbridge, Tacoma, Wash. ..... Nov. 9
Nov. 24. Bridge, Minneapolis, Minn. ..... Nov. 2
Jan. 1. Steel bridge, Pensacola, Fla. ..... Sept. 28
Jan. 1. Bridge, steel, Pensacola, Fla. ..... Nov. 2
Jan. 23. Bridge, Belgium ..... Nov. 2

BUILDINGS.

Nov. 16. Light fixtures, Ft. Washington, Md. ..... Nov. 9
Nov. 16. Light fixtures, Washington, D. C. ..... Nov. 9
Nov. 20. School, Danbury, Ia. ..... Oct. 26
Nov. 20. Station, Charleston, S. C. ..... Nov. 16
Nov. 21. Buildings, Pipestone, Minn. ..... Nov. 2
Nov. 21. Jail, Linden, Ala. ..... Nov. 9
Nov. 22. Building, Gowanda, N. Y. ..... Nov. 9
Advertised, Eng. News, Nov. 9.
Nov. 22. High school, Ticonderoga, N. Y. ..... Nov. 9
Nov. 22. Heating, Evanston, Wyo. ..... Oct. 26
Nov. 25. Light fixtures, Washington, D. C. ..... Nov. 9
Nov. 25. Building, Washington, D. C. ..... Nov. 16
Nov. 27. School, Hoboken, N. J. ..... Nov. 16
Nov. 27. Quarantine station, Mullet Key, Fla. ... Oct. 26
Advertised, Eng. News, Oct. 26 and Nov. 2.
Nov. 27. Hospital, etc., Pensacola, Fla. ..... Oct. 26
Advertised, Eng. News, Oct. 26 and Nov. 2.
Nov. 27. Court-house, Enid, Okla. ..... Nov. 9
Nov. 28. Cells, Kansas City, Mo. ..... Oct. 26
Nov. 23. Hospital, New London, Conn. ..... Nov. 2
Nov. 29. Buildings, etc., Grand Junction, Colo. ..... Nov. 2
Nov. 29. Building, West Point, N. Y. ..... Oct. 19
Advertised, Eng. News, Oct. 19, 26 and Nov. 16 and 23.
Nov. 30. Concentrating plant (Mfg. Plants), Comer, Ore. ..... Nov. 16
Dec. 2. Buildings, Philadelphia, Pa. ..... Nov. 2
Dec. 2. Drill hall, Cheyenne, Wyo. ..... Nov. 9
Advertised, Eng. News, Nov. 9 to Dec. 7.
Dec. 4. Plumbing, etc., Elizabeth, Va. ..... Nov. 16
Dec. 6. School, Monticello, Ind. ..... Nov. 16
Dec. 6. Buildings, Baltimore, Md. ..... Nov. 16
Dec. 7. Buildings, Mt. Pleasant, Mich. ..... Nov. 16
Dec. 7. School house, Laurel, Miss. ..... Nov. 9
Dec. 8. Y. M. C. A. building, Montgomery, Ala. Nov. 16
Dec. 9. Electric elevator, Norfolk, Va. ..... Nov. 16
Dec. 12. Court-house, Fairmont, Minn. ..... Nov. 16
Dec. 12. Capitol building, Bismarck, N. Dak. ..... Oct. 5
Dec. 14. School, Humboldt, Tenn. ..... Nov. 9
Dec. 20. Experiment station, Annapolis, Md. ..... Nov. 16
Jan. 4. Post-office, Natchitoches, La. ..... Nov. 16
Advertised, Eng. News, Nov. 16 and 23.
Jan. 10. Post-office, Reno, Nev. ..... Nov. 16

WATER SUPPLY AND IRRIGATION.

Nov. 16. Water pipe, Providence, R. I. ..... Nov. 9
Advertised, Eng. News, Nov. 9.
Nov. 16. Water-works, Lebanon, Pa. ..... Oct. 26
Advertised, Eng. News, Oct. 26 and Nov. 2.
Nov. 20. Tank and tower, Woodland, Cal. ..... Nov. 9
Nov. 22. Boilers, pumps, etc., Phoenix, Ariz. ..... Nov. 2
Nov. 22. Water mains, New York, N. Y. ..... Nov. 2
Nov. 22. Main extensions, etc., Vancouver Barracks, Wash. ..... Nov. 2
Nov. 25. Concrete reservoir, Fort Miley, Cal. ..... Nov. 9
Nov. 27. Pipe and specials, Portland, Ore. ..... Nov. 9
Advertised, Eng. News, Nov. 9 and 16.
Nov. 27. Boilers, pumps, Fort Screven, Ga. ..... Nov. 9
Nov. 28. Pump house alterations, Fort Dupont, Del. Nov. 9
Nov. 28. Water-works, Perry, Fla. ..... Nov. 16
Advertised, Eng. News, Nov. 16 and 23.
Nov. 28. Water-works, Davis, Ind. T. ..... Nov. 16
Nov. 29. Water mains, New York, N. Y. ..... Nov. 16
Dec. 1. Water-works, Ballinger, Tex. ..... Nov. 9
Dec. 5. Yellowstone dam, Billings, Mont. ..... Sept. 14
Advertised, Eng. News, Sept. 14 to Oct. 26.
Dec. 6. Intake pipe, Auburn, N. Y. ..... Nov. 16
Advertised, Eng. News, Nov. 16 to Dec. 7.
Dec. 15. Irrigation canal, etc., Billings, Mont. ... Oct. 19
Advertised, Eng. News, Oct. 19 to Dec. 14.
Dec. 29. Irrigation canal, San Francisco, Cal. ..... Nov. 2
Advertised, Eng. News, Nov. 2 to Dec. 28.
Jan. 2. Water-works, Philippines ..... Sept. 21
Advertised, Eng. News.

SEWERAGE.

Nov. 16. Pipe sewers, Des Moines, Ia. ..... Nov. 9
Nov. 16. Pipe sewer, Des Moines, Ia. ..... Nov. 2
Nov. 20. Pipe sewer, Webb City, Mo. ..... Nov. 9
Nov. 20. Pipe sewer, Bellefourche, S. Dak. ..... Nov. 16
Nov. 20. Sewers, water mains, Brevard, N. C. ... Nov. 16
Nov. 22. Sewer system, Gulfport, Miss. ..... Nov. 16
Advertised, Eng. News, Nov. 16.
Nov. 23. Trunk sewer, Elyria, O. ..... Nov. 9
Nov. 24. Pipe sewers, Shreveport, La. ..... Nov. 9
Advertised, Eng. News, Nov. 9 and 16.
Nov. 27. Pipe sewers, Stowe, Pa. ..... Nov. 16
Nov. 28. Dredging, New York, N. Y. ..... Nov. 16
Advertised, Eng. News, Nov. 16 and 23.
Nov. 30. Sewer system, Baton Rouge, La. ..... Oct. 26
Dec. 6. Intercepting sewer, Chicago, Ill. ..... Nov. 9
Dec. 11. Sewerage, Sheldon, Ia. ..... Oct. 12
Dec. 20. Sewerage, etc., Bristol, Pa. ..... Nov. 16
Advertised, Eng. News, Nov. 16 and 23.
Jan. 12. Sewer system, Philippines ..... Sept. 21
Advertised, Eng. News.

STREETS AND ROADS.

Nov. 16. Paving, Des Moines, Ia. ..... Nov. 9
Nov. 20. Graveling, Webb City, Mo. ..... Nov. 2
Nov. 20. Paving, etc., Montgomery, Ala. ..... Nov. 16
Nov. 21. Paving, Bayonne, N. J. ..... Nov. 16
Advertised, Eng. News, Nov. 16.
Nov. 23. Paving, asphalt, Cincinnati, O. ..... Nov. 9
Nov. 25. Walks and curbs, New Orleans, La. ..... Oct. 26
Nov. 30. Paving, Baton Rouge, La. ..... Oct. 26
Nov. 30. Macadamizing, Delaware, O. ..... Nov. 9
Dec. 1. Paving, etc., Cincinnati, O. ..... Nov. 16
Dec. 8. Road, Cincinnati, O. ..... Nov. 16

MISCELLANEOUS CONTRACTS.

Nov. 16. Shovels, axes, etc., Washington, D. C. . Oct. 26
Nov. 17. Ferry house, New York, N. Y. ..... Nov. 2
Nov. 17. Lumber, pipe, etc., Washington, D. C. . . Nov. 16
Nov. 18. Wireless telegraph, Washington, D. C. . Nov. 16
Nov. 18. Underground cable, Philadelphia, Pa. ... Oct. 26
Nov. 20. Concrete wall, Chattanooga, Tenn. ..... Oct. 12
Advertised, Eng. News, Oct. 12 to Nov. 16.
Nov. 20. Sand, supplies, New York, N. Y. ..... Nov. 16
Nov. 21. Air compressor, Camden, N. J. ..... Nov. 16
Nov. 21. Drills, rails, etc., Washington, D. C. .... Nov. 2
Nov. 21. Lumber, Washington, D. C. ..... Nov. 2
Nov. 22. Conduit materials, Baltimore, Md. ..... Nov. 9
Nov. 22. Dredging, New York, N. Y. ..... Nov. 9
Advertised, Eng. News, Nov. 9 and 16.
Nov. 22. Boilers, Poughkeepsie, N. Y. ..... Nov. 16
Nov. 23. Sluice gates, etc., Chicago, Ill. ..... Nov. 16
Nov. 24. Wharf, Shippegan, N. B. ..... Nov. 16
Nov. 24. Machinery, etc., Washington, D. C. ..... Nov. 16
Nov. 24. Dredging, Philadelphia, Pa. ..... Nov. 9
Advertised, Eng. News, Nov. 9 and 16.
Nov. 25. Drainage canals, etc., New Orleans, La. . Oct. 26
Nov. 27. Dredging, etc., New Orleans, La. ..... Nov. 2
Advertised, Eng. News, Nov. 2 to 30.
Nov. 27. Dredging, New York, N. Y. ..... Nov. 9
Advertised, Eng. News, Nov. 9 to 30.
Nov. 27. Garbage crematory, Grand Rapids, Mich. . Nov. 9
Advertised, Eng. News, Nov. 9-23.
Nov. 27. Boiler, Asbury Park, N. J. ..... Nov. 16
Advertised, Eng. News, Nov. 16 and 23.
Nov. 27. Concrete wall, Cincinnati, O. ..... Nov. 16
Nov. 28. Pipe system, New York, N. Y. ..... Nov. 16
Nov. 28. Drills, Pipe, etc., Washington, D. C. .... Oct. 26
Nov. 28. Fire alarm, Mare Island, Cal. ..... Oct. 19
Dec. 2. Concrete quay wall, Cuba ..... Oct. 19
Dec. 2. Concrete wall, Key West, Fla. ..... Oct. 19
Dec. 2. Concrete wall, Key West, Fla. ..... Oct. 19
Dec. 5. Machine tools, Washington, D. C. ..... Nov. 9
Dec. 5. Drainage ditch, Fort Dodge, Ia. ..... Nov. 16
Dec. 5. Sand, cement, etc., Washington, D. C. . Nov. 16
Dec. 6. Riprap jetty, etc., New York, N. Y. ... Nov. 16
Advertised, Eng. News, Nov. 16 to Dec. 7.
Dec. 7. Wharf, Charleston, S. C. ..... Nov. 9
Advertised, Eng. News, Nov. 9 to Nov. 30.
Dec. 10. Elevator, tools, Washington, D. C. ..... Nov. 16
Dec. 12. Lamps, generator, etc., Wash., D. C. ... Nov. 16
Dec. 12. Dam, Wheeling, W. Va. ..... Nov. 9
Advertised, Eng. News, Nov. 9 to Dec. 14.
Dec. 15. Telephone system, Billings, Mont. ..... Nov. 2
Advertised, Eng. News, Nov. 2 to Dec. 14.
Dec. 15. Railways, Philippines ..... Sept. 21
Dec. 13. Brass goods, pipe, Vancouver, B. C. ... Nov. 16
Dec. 27. Lock, dams, wall, Chicago, Ill. ..... Nov. 2
Advertised, Eng. News, Nov. 2.
Jan. 1. Statue, Indianapolis, Ind. ..... July 20
Advertised, Eng. News, July 20.
Jan. 2. Railway, Chile ..... Aug. 24
Advertised, Eng. News, Nov. 9 to Dec. 28.
Jan. 9. Wharf work, New Zealand ..... Nov. 2
May 1. Steel dock, Chile ..... Nov. 9

RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

ALCOLU R. R.—R. J. Alderman, Pres., Alcolu, S. C., announces that company may build a 4-mile extension from Bethlehem, S. C., to Lynch River. D. C. Shaw, at Alcolu, is Pur. Agent.

ATCHISON, TOPEKA & SANTA FE.—At a recent meeting of the directors of the Eastern Oklahoma division of the Santa Fe it was voted to build ten miles of road between Davis, Ind. T., and Sulphur Springs, Ind. T. Noted on Oct. 26.

We are advised in regard to prospective improvements between Ash Fork and Albuquerque, N. Mex., that "nothing definite has been decided regarding work between these points up to the present time. Surveys have been made for reduction of grade to 0.6 maximum, both ways, but the question of whether or not the work will be started in the near future has not been decided. It will embrace a change of line in a number of places, and lowering and raising of the present track at other points."

Company has petitioned the court at Muskogee to appoint an appraising board to condemn a right-of-way from Tulsa, Ind. T., to Shawnee, Okla., a distance of 120 miles. This will connect the branch between Independence, Kan., and Tulsa and the Oklahoma line at Shawnee. C. A. Morse is Acting Ch. Engr., Coast Lines, at Los Angeles, Cal.

BALTIMORE & OHIO.—It is reported that a line will be built from Clarksburg to Belington, W. Va., about 30 miles, to be known as the Elk River R. R. D. D. Carothers is Ch. Engr., Baltimore, Md.

CUMBERLAND RIVER & NASHVILLE.—Contract has been awarded for construction of first 20 miles of proposed railway from Corbin, Ky., into Tennessee, about 100 miles long. This 20-mile section will extend from Burnside to Monticello. Noted on Nov. 2. L. F. Hubble, Burnside, Ky., is interested.

CANADIAN PACIFIC.—Contract has been awarded to IRONSIDE, RANNIE & CAMPBELL, of Vancouver, B. C., for track-laying, ballasting and bridging on section between Spence's Bridge and Nicola Lake, B. C., 45 miles. LOSS & MACDONALD are general contractors.

CINCINNATI, HAMILTON & DAYTON (Erie).—A new freight line may be constructed from Toledo, O., to Atlantic seaboard. C. A. Wilson is Ch. Engr., at Cincinnati, O.

CINCINNATI, NEW ORLEANS & TEXAS PACIFIC.—Twelve miles of double-track will be built from Flat Rock to Pine Knot, Ky., it is reported. G. B. Nicholson is Ch. Engr., at Cincinnati, O.

COLUMBUS & LAKE MICHIGAN.—C. T. Hobart, Gen. Mgr. and Ch. Engr., Lima, O., states that the extension from Lima to Columbus, 70 miles, is being located. The contract has been let to the WESTERN CONSTRUCTION CO., 33 Wall St., New York. Grading will begin in the heavy cuts about December 1. It is proposed to build from Defiance, the northern terminus of the road, north to Coldwater, Mich., and preliminary surveys have been made. The total length of the line, when completed from Columbus to Lake Michigan, will be 320 miles. Elliott C. Smith is Pres., 33 Wall St., New York.

CHICAGO, ROCK ISLAND & PACIFIC.—Plans and specifications are being prepared by J. G. Bloom, Engr. M. W., Topeka, Kan., for improving freight terminal facilities at Armourdale Yards, Kansas City, Mo. Estimated cost, $200,000.

CHICAGO, TENNESSEE & GULF.—The Tennessee Industrial Railroad Co. has amended its charter, changing the name to the Chicago, Tennessee & Gulf Railroad Co., and authorizing it to build from a point on the south bank of the Cumberland River in Dickson County, Tenn., four miles below the mouth of Harpeth River, to Florence and Sheffield, Ala.; also to build a branch from Lobelville to Nashville, Tenn. The entire line will be about 200 miles long. William Shipman is Gen. Mgr., Charlotte, N. C.; W. C. Thorbus, of Chicago, Secy. and Treas.; H. B. Farrar, of Jackson, Tenn., is Ch. Engr. J. R. Neblett, of Charlotte, Tenn., is reported to have made surveys.

EDDY LAKE & NORTHERN.—This company has applied for a charter to build a standard gage line, 35 miles long, to connect Marion, S. C., and Eddy Lake. The incorporators are W. M. Burgan and Norman James, of Baltimore, Md.; R. B. Scarborough, of Conway, and George Officer and J. W. Little, of Eddy Lake, S. C. The capital of the company is $100,000, which may be increased to $200,000.

GAINESVILLE MIDLAND.—A contract has been awarded to the GAINESVILLE & ATHENS CONSTRUCTION CO., of which W. W. Mackall is Pres., at Savannah, Ga., to build an extension from Jefferson to Athens, Ga., 19 miles. Noted on Nov. 2. Stockholders recently voted to increase the capital stock from $250,000 to $550,000. E. L. Douglass is Gen. Mgr., at Gainesville, Ga.

ILLINOIS CENTRAL.—Official announcement has been made by the Illinois Central Railroad Co. of its intention to build a line from Jackson, Tenn., to Birmingham, Ala., a distance of 216 miles. Construction bids have been advertised, and it is stated that the road will be in operation within 18 months. A. S. Baldwin, Chicago, Ill., is Ch. Engr.

KENTUCKY & TENNESSEE R. R.—We are advised that company has 12 miles of railroad grading to let at once, on the K. & T. R. R. J. E. Butler, Supt., Stearns, Ky.

LOUISIANA RY. & NAVIGATION CO.—Contract for inclines at Mississippi and Atchafalaya Rivers has been awarded to SPENCE & PARRISH, of Port Arthur, Tex.

LOUISIANA EAST & WEST.—We are advised that this road is to build a line from Bunkie, La., to Villeplatte, La., a distance of 21 miles. Contract for ten miles of line has been let to J. B. DICKINSON, New Orleans, La. Contract for remainder of line is yet to be let. H. P. Mobberly, Bunkie, La., is Ch. Engr.

MOBILE & OHIO.—We are informed that surveys are being made for an extension of the Warrior Southern R. R., from Tuscaloosa, Ala., up the Warrior River for a distance of 30 miles. T. L. Condron is Consult. Engr., at Chicago, Ill.

MEMPHIS, PENSACOLA & WEST ALABAMA.—W. K. Allen, Ch. Engr., is reported to be making survey for this railway from Demopolis to Birmingham, Ala., about 90 miles.

MIDLAND RY. OF MANITOBA.—Contract has been awarded to JOHN PRONT, of Portage la Prairie, Man., for building this railway from the international boundary to Portage la Prairie. Noted on Oct. 26.

NASHVILLE & HUNTSVILLE.—J. H. Connor, Pres., informs us that the N. & H. Ry. is a steam road. The following item appeared under Electric Railways last week: "The Nashville & Huntsville R. R. Co. will be ready to receive bids in the next 30 days on the first division, from Nashville, Tenn., to Huntsville, Ala. The maximum grade will be 1% and the heaviest curvature will not be over 6°. There is considerable concrete masonry on this line of road and considerable heavy grading on this 100 miles of road bed. Profiles and specifications will be ready soon for contractors to submit their bids for the construction work of grading, masonry and track ballasting. The steel superstructure work will be let separately. Right-of-way has been secured along the entire line. This railway will connect with six trunk lines already in operation. Company is now building the third division of this road from Opelika to Anderson, Ala. This railway, as projected, will extend from Nashville, Tenn., to Pensacola, Fla., and company plans to complete it and have it in operation in 1907."

OKLAHOMA & TEXAS.—P. H. McCrickett, Ch. Engr., Oklahoma City, Okla., will run surveys at once for this railroad.

OREGON & IDAHO.—This company has been incorporated to build a railway from Emmett, Idaho, to Ontario, Ore. Nathan C. Rivhards, of Ontario, Ore., is said to be the promoter.

OPELOUSAS, GULF & NORTHEASTERN.—H. C. Daigre, Engr., of Alexandria, La., will make final survey of route for this railway at once. Noted last week.

PENNSYLVANIA R. R.—Surveys are being made by this company for a freight line to run through North Bend, about two miles east of Catonsville, Md. A 60-ft. cut probably will be constructed. The railroad will cross the Frederick road at the North Bend bridge on an elevated structure. It will connect with the main line of the Baltimore & Potomac at a point near Loudon Park cemetery.

PUEBLO, OKLAHOMA CITY & NEW ORLEANS.—This company has been chartered in Oklahoma, with $3,000,000 capital. The road is to run from Pueblo, Colo., to New Orleans, La., passing through the following counties in Oklahoma: Pottawatomie, Cleveland, Oklahoma, Canadian, Kingfisher, Blaine, Dewey, Woods, Woodward and Beaver. It will be about 1,050 miles long. The incorporators are J. H. Wheeler, W. C. Burke, R. A. Wooldridge, George H. Dodson and John H. Wright, all of Oklahoma City, Okla.

PACIFIC & IDAHO NORTHERN.—J. W. & B. W. SLICK, of Salt Lake City, Utah, have contract for completing 6½ miles of grading from present terminal at Weiser, Idaho. This railway extends from Council to Weiser, 60 miles. Geo. Pope is Secy., 21 Park Row, New York; Edgar M. Heigho is Gen. Mgr., and A. E. Fox, Ch. Engr., at Weiser.

PITTSBURG, BINGHAMTON & EASTERN.—It is announced by E. W. Sawyer, Supt., at Binghamton, N. Y., that construction will begin at once.

ROCK ISLAND, ARKANSAS & LOUISIANA.—It is announced that the Arkansas Southern, the Little Rock & Southern and the Arkansas Southern Extension Railroad companies, all controlled by the Chicago, Rock Island & Pacific, have been consolidated under the above name and articles of consolidation have been filed with the Secretary of State of Arkansas. The Little Rock & Southern is under construction from Traskwood southeast to Crossett, Ark., 10½ miles, with a branch, 35 miles long, from Summerville to Eldorado, where connection is made with the Arkansas Southern, extending to Winfield, La., 101 miles. Under the charter of the Arkansas Southern Extension Company an extension is being built from Winfield to Alexandria, La., 44½ miles. The articles state that the company will operate the following lines: First, from Crossett to some point on or near the Mississippi River in Louisiana; second, from a point upon the Haskell-Eldorado line to Malvern, Ark.; third, from Haskell, Ark., to Little Rock; fourth, from a point at or near Junction City, Ark., to Shreveport, La.; fifth, from a point at or near the southern boundary of Winn Parish, La., to Alexandria, La. Capital stock, $15,000,000. Directors: E. P. Pierce, H. W. Morrison, W. S. Tinsman, T. S. Buzebee, of Little Rock, and A. E. Sweet, of Ruston, La. General offices will be at Little Rock, Ark.

SNOWBIRD VALLEY.—Charter has been granted to this company in North Carolina. Capital is $75,000. A railroad, 15 miles long, will be built in Cherokee County. The incorporators are W. A. Lewin, W. B. Hamrick, C. M. Hickerson, S. Porter, E. G. Hennermann and J. G. Barker, of Andrews, N. C.; and W. A. Lewin, of Staunton, Va.

ST. MAURICE VALLEY.—W. S. Hart, Secy., Montreal, Quebec, states that this company proposes to build a road from Three Rivers to Shawinigan Falls, Que., a distance of 22 miles, following the south shore of the Saint Maurice River. Surveys have been completed and grading has been commenced. The contractors are ROSS & McRAE. Vivian Burrill, of Shawinigan Falls, Que., is Pres., and L. A. Darey, of Three Rivers, Que., is Ch. Engr.

TIDEWATER RY.—We are informed by H. Fernstrom, Ch. Engr., Norfolk, Va., that the mileage under construction is as follows: Deepwater Railway, from Deepwater to Rock, W. Va., 84 miles; Tidewater Railway, from Sewall's Point (Norfolk) westerly to the crossing of the Seaboard Air Line Railway near Lawrenceville, Va., 103 miles; from S. A. L. crossing near Lawrenceville to Rock, W. Va., upon which bids for grading have been received, 259 miles; total, 446 miles. As noted last week bids have been received for building remainder of line. A map showing the line of the Tidewater and Deepwater Railways is on file at New York office of Engineering News.

ELECTRIC RAILWAYS.

The names of parties awarded contracts are printed in capital letters.

BROOKLYN, N. Y.—We are informed that bids were received on Nov. 2 by John H. Dwyer, Engr.-in-Charge Brighton Beach improvement, on proposal No. 1, from Church Ave. to Ave. O, Brighton Beach Division Brooklyn Union Elevated R. R. Noted fully on Oct. 26. Total bids were as follows: Charles Cranford, 38 Court St., Brooklyn, $505,996; Uvalde Asphalt Paving Co., 1 Broadway, $521,025; James A. Hart Co., 256 Broadway, $550,845; Beinhauer & See, 289 Fourth Ave., $572,254; James H. Holmes, $587,069; W. H. Gahagan, 231 Lincoln Pl., Brooklyn, $661,846; A. F. Shields, 215 West 125th St., $688,988; J. G. White & Co., 49 Exchange Pl., $742,285; Degnon Contracting Co., 21 Park Row, $756,949; Monolith Reinforced Concrete Co., $762,730; Ford & Waldo, 21 Park Row, $785,603; Borough Construction Co., 44 Court St., Brooklyn, $870,591. For itemized bids see under Contract Prices. The contract was awarded to CHARLES CRANFORD.

CAIRO, N. Y.—The Catskill Mountain & Mohawk Valley Railroad Co. has been incorporated with a capital of $2,000,000. It is planned to operate an electric line, 78 miles long, from Cairo, Greene County, to a point near Oneonta, with a branch running from Jefferson, Schoharie County, to Stamford, Delaware County. The directors are Edward C. White, Edgar P. Holdridge, Charles V. D. Peek, William B. Reed, Jr., and James W. McCabe, of New York; Herbert S. Lounsberry, of Portchester; Marcus Hershfield, of Rochester; E. E. Billings, of Gilboa, and George W. Kendall, of Stamford.

ROCHESTER, N. Y.—The BUFFALO POLE, LINE & CONSTRUCTION CO., of Buffalo, which has secured a sub-contract from the Niagara, Lockport & Ontario Power Co., will at once begin preliminary work of electrifying the West Shore R. R. division of the New York Central & Hudson River R. R. between Rochester and Syracuse, 81 miles. C. S. Saunders is Pres. of the Buffalo Co.

BROOKLYN, N. Y.—The Brooklyn Rapid Transit Co. has awarded contracts to the WESTINGHOUSE ELECTRIC & MFG. CO., of Pittsburg, Pa., for 1,500 50-HP. motors. Total cost, about $1,000,000.

LYONS, N. Y.—Right-of-way has been secured from Sodus Point to Lyons for proposed electric railway. Edson M. Hamm, of Lyons, has applied for franchise. In connection with this line a railway may be built from Lyons to Geneva. Noted last week.

ORISKANY FALLS, N. Y.—It is planned to build an electric railway from Clinton to Hamilton, N. Y. William C. McAdam and F. K. Baxter, Civil Engrs., of Utica, and Thomas F. McBride, of Clinton, are interested.

JERSEY CITY, N. J.—It is reported that the Hudson & Manhattan Ry. Co. has filed certificate abandoning a proposed branch, 1½ miles long, in Jersey City. To take the place of the abandoned road the company proposes to construct a road from Jersey City to Newark. With the certificate of change is a deposit of $16,800, required by the corporation laws. The proposed branch will extend from Jersey City to Market St., Newark, a distance of less than 8½ miles. The road will pass through Kearney and Harrison, thence under the Passaic River into Newark. In Newark the new road will follow that part of Railroad Ave. south of the viaduct of the Pennsylvania Railroad. From the place of beginning in Jersey City to the Newark terminal the road will be entirely below the surface of the ground, or of subway construction.

WASHINGTON, D. C.—The Capital Traction Co. will extend its 14th St. line with a double-track, underground electric system, from present terminal at 14th and Park Sts., N. W., out 14th St. to Piney Branch Road, about 1½ miles. D. S. Carl is Ch. Engr.

WELLSBURG, W. VA.—The Wellsburg & Washington Electric Railway Co. has been incorporated, with a capital of $10,000, for the purpose of building an electric line from Wellsboro, W. Va., to Washington, Pa. Incorporators are: H. G. Lasear, S. George, H. G. Emery and others.

HIGH POINT, N. C.—The High Point & Winston-Salem Interurban Railway Co. has awarded contract to W. T. MARKEE & CO., Real Estate Trust Bldg., Philadelphia, for building its line, which will be 25 miles long. Company has been granted a charter to build its proposed line to connect High Point and Winston-Salem and other lines not over 50 miles in any direction. The officers are: President, J. H. Millis, of High Point; vice-Pres., C. C. Yetter, of Bloomsburg, Pa.; Secy. and Treas., Frank A. Chaplin, of Philadelphia; Executive Committee, C. C. Yetter, F. A. Chaplin and R. H. Wheeler, of High Point; Directors, J. H. Millis, E. M. Armfield, R. H. Wheeler, High Point; D. H. Blair, Winston; Senator John E. Revburn, Frank A. Chaplin, John P. Harlin, of Philadelphia; C. P. Hancock, of Danville, Pa.

MADISONVILLE, KY.—W. T. Harris, Pres. Dawson Springs & Madisonville Ry., Hopkinsville, Ky., states that this company will build a combined steam and electric railway from Dawson Springs to Madisonville, Ky., 20 miles. The American Engineering Co., of Indianapolis, Ind., and Chicago, Ill., will make survey. The incorporators are W. G. Harr[illegible] Ames Haydon, W. J. Powell and Luth[illegible] Haydon, all of Hopkinsville, Ky.

LOUISVILLE, KY.—It [illegible] announced by the Louisville & Southern [illegible]ana Traction Co. that it will extend [illegible] now connecting Louisville, New A[illegible] and Jeffersonville, to Charlestown, [illegible] miles from Louisville. The new line [illegible] ultimately be extended to North Vernon. There it will connect with lines to [illegible]bour, Columbus, Franklin, Indianap[illegible] and smaller towns. A survey of the [illegible] line to Charlestown has been com[illegible] from Jeffersonville. R. W. Waite, [illegible] Albany, Ind., is Vice-Pres.

SPRINGFIELD, O.—A [illegible] order has been issued for the sale of [illegible] property of the Springfield, South Ch[illegible]on, Washington Court-House & Chi[illegible] Traction Co., to take place Dec. 1. [illegible] property consists of 12 miles of com[illegible] road, with right-of-way and material fo[illegible] miles. The property is appraised at $8[illegible]

INDIANAPOLIS, IND.—The [illegible]icago, Lafayette & Southeastern Tract[illegible] has been incorporated with $100,000 [illegible] to build an electric railway from Lafa[illegible]te, Ind., to Kankakee, Ill. W. S. Reed, [illegible] Martin M. Hugge and D. W. [illegible] Harding, are named as incorporators.

KALAMAZOO, MICH.—We are advised that construction is under way on the Kalamazoo, Lake Shore & Chicago Tracti[illegible] Co.'s line. It will be 52 miles long; 21 m[illegible] will be in operation about Jan. 1 and [illegible]ance about July, 1906. The route is via [illegible]emo, Mattawan, Lawton, Paw Paw, Lak[illegible] Cora, Lawrence, Bangor and South Haven. S. J. Dunkley, Kalamazoo, is Pres. and [illegible]mes Grant, Asst. Mgr.; Joseph E. Lockwood, of Detroit, is Ch. Engr. The Kalamazoo, Lake Shore & Chicago Traction Co was recently incorporated with capital stock of $200,000. The incorporators were: S. J. Dunkley, E. C. Dayton, W. R. Beebe and James Grant, of Kalamazoo; C. W. Williams, of South Haven; George R. Bardeen, of Otsego; A. W. Norton, of Chicago; George L. Craig, of Toledo; J. W. Thompson, of Detroit; George T. Arnold, of Mackinac Island, and Joseph E. Lockwood, of Detroit.

CLARINDA, IA.—We are advised that Frank S. Cummins, of Des Moines, Ia., has made survey for an interurban railway along the Nodaway River from Clarinda to Blanchard and down the Tarkio Valley to Tarkio, Mo. In his report to promoters he stated that conditions were not favorable to immediate construction of the railway.

INDIANOLA, IA.—Council has received two applications for franchises for electric railways. One company is represented by Attorney Wm. Wilcoxen, of Des Moines, Ia., and the other by H. P. Sheppard, F. S. Burberry, F. C. Sigler, J. M. Harlan, Pres. of the First National Bank; J. F. Samson, William Buxton, Jr., and H. E. Hopper, all of Indianola.

PORTLAND, MO.—George A. Duncan and Edward Woodman, of Portland, are reported to be interested in a plan to build an electric railway from Springfield, Mo., to Joplin, Mo., via Aurora, Pierce City, Monett, Carthage and Webb City.

KANSAS CITY, MO.—H. B. HARDING, of Los Angeles, Cal., has contract for building the Kansas City, Lees Summit & Eastern Electric Ry.

TOPEKA, KAN.—Hart Statnaker, of Kansas City, Kan., Engr., is running a survey for proposed electric railroad between Topeka and Kansas City.

TOPEKA KAN.—The Falls City, Sycamore Springs, Sabetha & Southwestern Railroad Co., capitalized at $100,000, has been chartered to build an electric railway from Sycamore Springs, through Nemaha, Pottawatomie, Jackson and Shawnee Counties to Topeka. A line is also proposed to run in a westerly direction from Sycamore Springs to the west line of the state, through the counties of Marshall, Washington, Cloud, Republic, Jewell, Mitchell, Smith, Osborne, Phillips, Rooks, Norton, Graham, Sheridan, Decatur, Rawlins and Thomas. The directors and incorporators are: Samuel Kimmel, E. S. Towle, W. H. Crook, W. E. Dorrington, Albert Maust, J. H. Miles and Edwin A. Towle, all of Falls City, Neb.; E. V. Kauffman and H. Reeding, of Sabetha; W. A. S. Bird, of Topeka; J. T. Slusher and Ro[illegible] Hasseltine, of Sabetha; George Boone, Jr., of St. Joseph, Mo., and George L. Campen, of Lincoln, Neb.

LITTLE ROCK, ARK.—A new survey will be made for the Little Rock & Hot Springs Interurban Railway that is to be built between Little Rock and Hot Springs. Construction will begin about Jan. 1. L. Garrett, Little Rock, is Secy. and Gen. Mgr. of company.

CRIPPLE CREEK, COLO.—George S. Davidson, of Pittsburg, Pa., is said to be promoting an electric line between Canyon City and Cripple Creek. Estimated cost $1,000,000.

SALEM, ORE.—The Citizens' Light & Traction Co., of Salem, will build an electric railroad to Portland. Right-of-way is being secured. R. Welsh is Ch. Engr. The company will also build an extension to Liberty.

SAN JOSE, CAL.—The San Jose & Santa Clara Ry. has been acquired by Lewis F. Hanchett, of San Francisco. The road is to be partly rebuilt and extended.

LIGHT AND POWER PLANTS.

The names of parties awarded contracts are printed in capital letters.

CLAREMONT, N. H.—We are informed that Roberts & Barney will build a $25,000 power plant here. I. W. Jones, of Milton, N. H., is Engr. Work includes a rock-filled crib dam and reinforced concrete dimensions and power station. Wheel work is to be furnished by the DAYTON GLOBE IRON WORKS CO., Dayton, O., and the generators by the ALLIS-CHALMERS CO., of Milwaukee, Wis.

BUFFALO, N. Y.—Commissioner Francis Ward, of the Department of Public Works, on Nov. 3, received only one bid on the contract for furnishing cables to utilize space reserved for the city in the conduits under its franchise with the Niagara Falls Power Co., and the Niagara Falls Hydraulic & Manufacturing Co. The bidder was the Robertson Electric Co., which bid $82,748, according to specifications. The company also submitted an alternate bid of $57,641.

At recent election it was voted affirmatively that city own and operate an electric lighting plant.

NEW YORK, N. Y.—Bids are asked until 3 p. m., Nov. 20, for furnishing 55,000 incandescent electric lamps. Maj. G. S. Bingham, Q. M., 39 Whitehall St.

NEWARK, N. J.—City Counsel Joseph Coult has submitted report to Board of Works that he is "of the opinion that there is no law now which authorizes this board to contract for the construction and maintenance of a plant for public lighting, and that application will necessarily be made to the Legislature if power is sought for this purpose."

PHILADELPHIA, PA.—At a recent meeting of the Juniata Water and Water Power Co., the capital stock of the company was increased from $5,000 to $750,000. Company will build an electric power plant on the Juniata River, near Huntingdon. W. J. Sewell, Jr., is Secy., Perry Bldg., Philadelphia.

HAMILTON, MD.—The Hamilton Water, Light & Power Co. has been incorporated, with $35,000 capital stock, to supply water and light to Hamilton and Lauraville, Md.

HAVRE DE GRACE, MD.—A. Grant, of Mechanicsburg, Pa., has applied for a franchise to establish a gas plant at Havre de Grace. The ordinance is now before council.

LENOIR, N. C.—The Citizens' Light & Power Co. has been incorporated with $25,000 capital stock, by H. F. Newland, W. P. Ivey, E. C. Ivey and others. E. C. Ivey and associates were reported on Nov. 2 as having been granted 30-year franchise to operate electric light and power plant.

CHARLOTTE, N. C.—We are advised that the Southern Power Co., Trust Bldg., Charlotte, is constructing water power plant at the Great Falls, in Chester County, S. C. Company will install in this plant 24,000 KW., and expects to let contract for electrical machinery between now and Dec. 1st. Water wheels covering six units of 5,200 HP. each and two units of 700 HP. each have been awarded to the ALLIS-CHALMERS CO., of Milwaukee, Wis. Two units of water wheels of 5,200 HP. each were let to the HOLYOKE MACHINE CO. Company is doing all work on power plant and dam by day labor, having begun construction in July of this year, and expects to have plant ready for delivering power Jan. 1st, 1907. The Southern Power Co. was chartered with capital of $7,500,000, to develop water power on the Catawba and Wateree Rivers. The officers are: Pres., Dr. W. Gill Wylie, 28 West 40th St., New York City; first vice-Pres., B. N. Duke, of Durham; second vice-Pres., and Ch. Engr., W. S. Lee, Jr., of Charlotte; Secy. and Treas., R. B. Arrington, of New York; assistant Secy. and Treas., W. H. Martin, Jr., of Charlotte. Company is at present constructing about twenty miles of railroad, ten miles of which will be completed by Jan. 1st. This contract was let in September, and all the material is on hand.

WATKINSVILLE, GA.—A. W. Ashford, D. Osborn and A. C. Jackson, it is reported, will build an electric-light and water-works plant.

JACKSONVILLE, FLA.—The ALLIS-CHALMERS CO., of Milwaukee, Wis., has been awarded contract by Board of Bond Trustees for two 500 KW. steam turbine generators, at $56,135. R. N. Ellis is Supt. of city lighting plant.

LINEVILLE, ALA.—An electric power plant may be constructed by Henderson, Lewis Bros. & Co.

FORT PAYNE, ALA.—The Alabama Cooperage Co. has made application to council for an electric light and power plant at Fort Payne.

BYHALIA, MISS.—The Byhalia Light & Water Co. may install a storage-battery electric light plant. R. C. Rimmer, Collierville, Tenn., is Engr.-in-Charge.

SHREVEPORT, LA.—The Shreveport Gas, Electric Light & Power Co., of which R. C. Dawes, of Chicago, is vice-Pres., has contracted with the Citizens' Oil, Gas & Pipe Line Co., of Shreveport, for a supply of natural gas from the Caddo fields at Annanias, to be distributed through the mains of the local company to Shreveport consumers. It is reported that the Shreveport Gas Co. will advance $75,000 for the construction of the pipe line to this city from the field, a distance of 23 miles. The contract also provides for the construction of a belt main around the city for the purpose of supplying factories.

JAMESTOWN, O.—The Citizens' Gas Co., of Cincinnati, has applied to the city council here for a franchise.

SPRINGFIELD, O.—It is reported that Councilman Charles P. Dunn and John Garver have proposed to the city council here a project for a municipal gas plant.

GLENWOOD, IND.—A contract has been awarded to ESHELMAN & KAUFMAN, of Anderson, to construct five sub-power stations on the line of the Indianapolis & Cincinnati Traction Co. The first two will be built at Glenwood and Connersville.

MUNCIE, IND.—Jerome Herff, of Peru, Ind., with others, will install a water power plant at West Muncie on Buck Creek.

SHERMAN, MICH.—J. J. Hubbell, of Manistee, Mich., Ch. Engr., Manistee & Northern Ry. Co., has submitted plans and specifications to Wexford County Board of Supervisors for proposed dam and power house which the Manistee River Power Co. will erect at Sherman. Surveys have been made.

CERESCO, MICH.—The Commonwealth Power Co., of Kalamazoo, Mich., is erecting a power house and dam at Ceresco. It will cost $300,000.

KALAMAZOO, MICH.—The General Gas Light Co. is planning the erection of a new gas plant here, it is reported.

STREATOR, ILL.—The Roberts & Abbott Co., Schofield Bldg., Cleveland, O., has been engaged as Consulting and Supervising Engineers by The People's Light & Railway Co. and The Streator Gas & Light Co., of Streator, Ill. These two properties have been recently combined, and the work of merging the power houses is already under way. The engineers made a careful study of the situation previous to the consolidation, and since that time have been engaged in making the plans for the power house and other construction details.

SHEBOYGAN FALLS, WIS.—O'KEEFE & ORBISON, of Appleton, Wis., have secured a contract for the development of power on the Menominee River on the Penn Iron Mining Co.'s property near Sheboygan Falls. The contract includes the work of constructing a new concrete dam, the foundation for which is already completed.

BELLE PLAINE, MINN.—Bids are asked by Borough Council, J. E. Townsend, Borough Clk., until 8 p. m., Nov. 27, for an electric light plant, on which a 20-year franchise will be given. Bids are to state cost at which lights will be furnished.

INDEPENDENCE, KAN.—The General Light, Heat & Power Co., of Kansas City, has been granted a 20-year franchise for lighting plant.

WHITESBORO, TEX.—City has granted a franchise to M. P. Kelly, of Gainesville, Tex., for the installation of stand-pipe water-works system. Construction will begin in January, 1906, and as soon as the installation of water-works is completed Mr. Kelly will begin the construction of electric light plant and sewerage system.

McKINNEY, TEX.—W. S. Williams, representing the Industrial Gas & Construction Co., of Chicago, is reported by local newspapers to have stated that this company will begin the construction of a gas plant in this city at once. A franchise has been granted by the city council.

LEHIGH, IND. T.—The Consumers Ice Co., of Lehigh, has been granted a franchise to install an electric light plant for this city.

JULESBURG, COLO.—Question of lighting town by electricity is under consideration by council.

BELLINGHAM, WASH.—We are informed that the Columbia Improvement Co., 1325 Commercial St., Bellingham, is constructing power plant at Nooksack Falls for Stone & Webster, of Boston, Mass. S. L. Shuffleton is Engr.

GILROY, CAL.—We are informed that bids are asked until 6 p. m., Nov. 20, for steam or gas engine electrical generating apparatus for city. C. N. Hoover is Cy. Clk. F. Thurber, 129 South First St., San Jose, Cal., is Consulting Engr. General electric light equipment bids are also desired. Specifications are on file at office of Engineering News, New York.

WINNIPEG, MAN.—Bids are asked by Ald. J. C. Gibson, Chn., Fire, Water and Light Com., until 3.30 p. m., Dec. 18, for supply of producer gas plant of 2,500 continuous engine brake HP. H. N. Ruttan, Cy. Engr. (Advertised. Engineering News.)

BRIDGES.

The names of parties awarded contracts are printed in capital letters.

LEWISTON, ME.—The Council has been petitioned to construct a new steel bridge over the Androscogin River. John A. Jones is Cy. Engr.

PITTSBURG, PA.—A contract has been given by the Pittsburg & Lake Erie R. R. Co. for building a concrete bridge over Turtle Creek on the Monongahela division, to consist of three 36-ft. arches to carry five tracks, to the DRAVO CONTRACTING CO., of Pittsburg. A contract has also been let for bridge over Brady's run at Bridgewater to carry four tracks, to STRATTON-LEWIS & CO., 327 First Ave., Pittsburg.

WILKESBARRE, PA.—The Grand Jury has made a special report recommending the erection of 30 new bridges in different parts of the county. H. H. Harvey was foreman of jury.

DOYLESTOWN, PA.—County Commissioners have invited bids for the construction of a new steel bridge over Haycock Run. Edwin Kiser is Pres.

WASHINGTON, D. C.—The Secretary of the Interior has approved the recommendations of Engr. E. C. Gordon embodied in his report of an examination of 45 proposed bridge sites in Comanche County, Okla. Mr. Gordon recommended the erection of 15 bridges, estimated cost, $49,400, and disapproved the sites for 30 others. The approval of the Secretary is made conditional, however, upon the obtaining by local authorities of rights of way and the construction of additional bridges or roads in any case where the same may be required. Authority is given to proceed with the plans and specifications for bridges, the same to be submitted to the Department for approval.

CAVE, GA.—Bids will be received for steel bridge about Feb. 1. Address L. G. Gaines, Chn. County Comrs.

BIRMINGHAM, ALA.—It is reported that the County Commissioners have under consideration the erection of a new bridge over Connecticut branch, near Glass's Mills.

HATTIESBURG, MISS.—Five steel bridges will be constructed in Perry County. One of them, that over Leaf River, 140 ft. long and costing about $5,000, will be completed in ten days. The other structures will be located at Brooklyn, McCallum, Beaumont and Mahned. The AMERICAN BRIDGE CO. has the contracts.

FRIARS POINT, MISS.—The Board of County Supervisors has let the contract for construction of a steel bridge across Sunflower River between Clarksdale and Friars Point. The W. T. Young Bridge Co. was the lowest bidder.

BROOKHAVEN, MISS.—The Board of Supervisors has ordered the erection of a steel span bridge across Fair River, 11 miles east of here, which will be 160 ft. long. The contract will be let to the lowest bidder at the December meeting.

NEW ORLEANS, LA.—Reports state that the Algiers Electric Ry. Co. is planning the construction of a large viaduct here.

BARBERTON, O.—J. A. Gehres, County Surv., informs us that bids for constructing bridge on Robinson Ave., Barberton, were received Nov. 4, as follows: France & Botzum, Akron, $1,652; Western Reserve Const. Co., Medina, $2,334; E. J. Landor, Canton, $3,000; Toledo & Massillon Bridge Co., Toledo, $1,920; Canton (O.) Bridge Co., 2 plans, $2,214 and $1,848; Bueger Iron Co., Akron, 2 plans, $2,050 and $1,790; King Bridge Co., Cleveland, 4 plans, $2,100 to $2,926; Variety Iron Works, Cleveland, 6 plans, $2,305 to $2,598.

INDIANAPOLIS, IND.—The Board Public Works has taken steps to build a new bridge over Pleasant Run at Villa Ave. B. J. T. Jeup is Cy. Engr.

PLYMOUTH, IND.—The Commissioners of Marshall County have awarded a contract to build two bridges to the ROCHESTER BRIDGE CO. and for one bridge to the CANTON BRIDGE CO., and for two arches to FRANK SHIVELEY, of Plymouth.

SOUTH BEND, IND.—We are informed that the following bids were received Nov. 8 by County Commissioners for constructing (a) concrete substructure and (b) removing and erecting Jefferson St. bridge to Springbrook Park, over St. Joseph River: C. L. Strobel, Chicago, Ill., (b) $20,428; Jas. O. Heyworth, Chicago, (a) $15,831; Elkhart (Ind.) Bridge Co., (a) $17,000, (b) $7,700; LAFAYETTE (Ind.) ENGINEERING CO., (a) $10,174, (b) $8,750 (contract awarded); C. L. Capp, Osceola, Ind., (a) $10,784. John W. Harban, County Audr.

AUBURN, IND.—Herman D. Boozer, County Audr., informs us that the County Commissioners were restrained from letting contracts for steel arches by the Circuit Court, bids for which were opened Nov. 8.

INDIANAPOLIS, IND.—The NATIONAL BRIDGE CO., of Indianapolis, has been awarded the contract to build masonry abutments for track elevation at West St. at $3.45 for concrete work and 65 cts. for the excavation.

CADILLAC, MICH.—A. E. WILSON has been awarded contract to build boulevard bridge here, at $5,465.

WAUKEGAN, ILL.—This city is considering the erection of a new bridge to replace present structure at South Genesee St. Cost, about $90,000. M. R. Miller is Supt. Pub. Wks.; H. Thacker, Cy. Clk.

EARLVILLE, ILL.—At a special election held here it was decided not to borrow $3,600 for the construction of proposed steel and concrete bridge across Indian Creek.

NASHVILLE, ILL.—City Council has decided to build a new bridge on South Kakaskia St.

PEKIN, ILL.—It is stated that the Peoria & Pekin Union Ry. Co. will soon erect a new steel bridge at Pekin. A. Lagron is Ch. Engr., Peoria.

PORTAGE, WIS.—The following bids were received by Common Council for the construction of superstructure of the Wisconsin River Highway Bridge, according to plans by L. P. Wolff, C. E., St. Paul, Minn.: PAN AMERICAN BRIDGE CO., Newcastle, Ind., $29,292 (awarded contract); Milwaukee Bridge Co., $33,762; Minneapolis Steel & Machinery Co., $33,900; Modern Steel Structural Co., $34,051; W. S. Hewitt & Co., $34,400; Joliet Bridge & Iron Co., $34,574; J. L. Brickles, $35,983; Massillon Bridge Co., $36,100; Penn Bridge Co., $36,700; Hennepin Bridge Co., $37,460; American Bridge Co., $37,650; Wisconsin Bridge & Iron Co., $37,950; St. Paul Foundry Co., $38,688; Strobel Steel Const. Co., $38,913; Worden Allan Co., $40,743.

ST. PAUL, MINN.—The City Clerk has been authorized to advertise for bids for bridge over creek on Point Douglas Road. Est. cost, $2,000.

MANKATO, MINN.—The County Commissioners are considering the erection of either a concrete or steel bridge near Vernon Center.

ATCHISON, KAN.—Fred Giddings, Cy. Engr., is preparing plans and bids will probably be received some time this winter for reinforced concrete bridge across White Clay Creek. Cost, $60,000. Bids will also be received this winter for 100-ft. concrete bridge at Santa Fe St. Chas. A. Hawk is Cy. Clk.

CALIFORNIA, MO.—The INTERSTATE BRIDGE CO. has received the contract for constructing four steel bridges here for $6,200.

KANSAS CITY, MO.—Plans are being prepared by W. W. Hughes & Co., Engrs., 145 Van Buren St., Chicago, Ill., for a concrete and steel viaduct, 990 ft. long, including concrete approaches, and 50 ft. wide, for the Kansas City Belt Line Co. Bids will be received by W. B. Story, Jr., Ch. Engr., Topeka, Kan., as soon as plans are completed. (Previously noted.)

KANSAS CITY, MO.—W. W. Hughes & Co., Engrs., Chicago, have completed plans and bids will be received by W. B. Story, Jr., Ch. Engr., for three concrete and steel bridges, varying in length from 68 to 71 ft., and in width from 50 to 60 ft., for Kansas City Belt Line Co. Cost, $60,000.

CARTHAGE, MO.—Bids are asked by Wm. Kohlman, County Surv., until 3 p. m., Nov. 20, for constructing two steel bridges.

JEFFERSON CITY, MO.—F. W. Roer, County Clk., informs us that the contract for constructing a steel bridge was let Nov. 9 by County Commissioners to the CANTON BRIDGE CO., Ed. W. Appleby, Agt., for $3,683.

GAINESVILLE, TEX.—The County Commission has let contracts for construction of three iron bridges, two of which will be put in five miles east of the city and one across Elm Creek at California St. More contracts will be let at an early date.

SAN ANTONIO, TEX.—Another bridge over the San Antonio River is contemplated by Mayor Callaghan and steps preparatory to the construction of same are now being taken. John D. Rullman is Cy. Engr.

FORT GIBSON, I. T.—The Fort Gibson Light & Traction Co., capital $25,000, has been chartered. The company proposes to build a railway bridge across the Arkansas River between Muskogee and Fort Gibson.

STILLWATER, OKLA.—The JOLIET (Ill.) BRIDGE & IRON CO. received the contract for constructing six bridges at Stillwater, Okla., and not Stillwater, Minn., as was erroneously stated in last issue.

DENVER, COLO.—Following bids were opened Nov. 8 by U. S. Reclamation Service for structures for North Platte Project, Nebraska, Interstate Canal; (1) Schedule No. 1, (2) Schedule No. 2: W. O. Morrison, Denver, Colo., (1) $27,070; (2) $103,896; Guy F. Atkinson, Colorado Springs, Colo., (1) $31,735; Robinson & Maney, St. Louis, Mo., (1) $44,646, (2) $145,627; Lyn. S. Atkinson, Colorado Springs, Colo., (2) $119,430. See under Contract Prices.

MONTE VISTA, COLO.—The following bids were received Nov. 6 for constructing a bridge across Rio Grande River here: John W. Towle, Omaha, Neb., $5,240; Missouri Valley Bridge Co., Leavenworth, Kan., $5,170; Paterson Const. Co., Denver, $5,204; Pueblo (Colo.) Bridge Co., $4,850; C. C. Sheely, Denver, $4,968. T. W. Jaycox, State Engr., Denver, writes us that bids exceeded appropriation and were rejected. Plans will be revised and work readvertised.

SEATTLE, WASH.—Contract awarded to the INTERNATIONAL CONTRACT CO., at $2,083, for construction of the Skyhomish suspension bridge.

BELLINGHAM, WASH.—J. A. Miller, County Audr., writes us that the contract for constructing 165-ft. span combination steel and wood bridge across Nooksack at Welcome, has been let to the PUGET SOUND BRIDGE & DREDGING CO., of Seattle, for $6,140. Bids were opened by County Commissioners Nov. 8.

SAN MATEO, CAL.—D. Bromfield, Cy. Engr., writes us that an election will soon be held to decide on the question of issuing bonds to build two reinforced concrete bridges one to be 50 ft. span, 40 ft. wide, and the other three spans, 16 ft. each, 50 ft. wide. Total cost, $9,050.

SAN BERNARDINO, CAL.—The Board of Trade has indorsed a proposition for the issuance of $50,000 of bonds by the city, one-half to be used in building bridges and the balance for street improvements in street work in the way of building streets of silica shale.

SANTA ROSA, CAL.—Plans for the East St. bridge are again being considered by the Council. L. E. Ricksicker is Cy. Engr.

SAN BERNARDINO, CAL.—We are advised that the MINNEAPOLIS STEEL MACHINERY CO., of San Francisco, has been given the contract for constructing bridge at Mill St., for $2,585. Bids were opened Nov. 6 by Harry Allison, Cy. Clk.

SAN FRANCISCO, CAL.—Thos. P. Woodward, Cy. Engr., informs us that HEALY, TIBBETTS CONST. CO., 22 Market St., has been given the contract, at $11,156, for widening steel bridge at San Jose and Mt. Vernon Aves.

OGDEN, UTAH.—BATEMAN & DOYLE, of Ogden, were awarded contract by County Commissioners for building abutments for five new bridges in Ogden Valley, their bid being $1.25 per perch for masonry and $3 per cu. yd. for concrete.

MOUNT IDAHO.—It is stated that bids will be received by County Commissioners until Nov. 22 for construction of a bridge at Kooskia.

THREE RIVERS, QUE.—The St. Maurice Valley R. R. Co. will build a steel deck truss bridge at Head Race, 112 ft. long; also a steel arch bridge, 270 ft. long, over St. Maurice River to consist of seven spans each 150 ft. long. W. S. Hart, of Three Rivers, is Secy.

BUILDINGS.

The names of parties awarded contracts are printed in capital letters.

CHARLESTOWN, MASS.—The following bids were received Nov. 8 by Board of Education for construction, including heating and ventilating, electrical and plumbing work, Charlestown High School: McNeil Bros., Dorchester, $276,344; Connery & Wentworth, Boston, $265,914; P. H. Jackson & Son Co., Brockton, $262,808; Whiton & Haynes Co., Boston, $253,715; Coburn & Boughton, Boston, $252,900; Mack & Moore, Boston, $249,900; Henry McGahey, Cambridge, $239,137.

EVERETT, MASS.—D. B. FESSENDEN & CO., 427A Broadway, Everett, have been awarded the contract for constructing new school-house at Everett. Cost, $65,000. Loring & Phipps, Archs., 53 State St., Boston.

SALEM, MASS.—The High School Commission has reported three plans for new high school buildings to the Common Council, who will consider an appropriation for building. Cost, $200,000. Address J. N. Peterson, Mayor.

REVERE, MASS.—Penn Varney, Arch., Lynn, Mass., has prepared plans for new Franklin school house, at Revere.

SPRINGFIELD, MASS.—Fosberg & Co., of Boston, were the lowest bidders, at $118,000, for the construction of a hall of records for Hampden County, at Springfield. W. H. Brainerd is Chn. County Comrs.

BINGHAMTON, N. Y.—The Board of Education is contemplating the erection of a high school building. A. J. Inloes is Secy.

ALBANY, N. Y.—The Security Storage & Warehouse Co., 103-11 Montgomery St., has executed a mortgage of $150,000 to cover a bond issue of the same amount. The money will be expended in enlarging the company's buildings and facilities on Montgomery and Manor Sts. John F. O'Brien is Secy.

BROOKLYN, N. Y.—Louis Dananchet, Arch., 255 East New York Ave., has plans for four flat buildings for Snyder, Madamsky & Levin, 188 East New York Ave. Cost, $100,000.

Same architect has plans for 12 two-story residences for Wallin & Bauman, 300 Snediker Ave. Cost, $90,000.

T. Bennett, 311 52d St., Brooklyn, has plans for 24 two-story residences to be erected at Windsor Place and Tenth Ave., for W. M. Calder. Cost, $100,200.

J. G. Glover, Arch., 186 Remsen St., has plans for residence on Garfield Place, near Eighth Ave., for the Park Slope Building Co., 54 Wall St., Borough of Manhattan. Cost, $80,000.

NEW YORK, N. Y.—Geo. F. Pelham, Arch., 503 Fifth Ave., has plans for five flat buildings to be erected on Lenox Ave., near 142d St., for Parnass & Dellon, 1787 Lexington Ave. Cost, $300,000.

Same architect has plans for two flat buildings for Landin & Stamm, 1447 Fifth Ave., to be erected on 175th St., near Amsterdam Ave. Cost, $76,000.

J. C. Cocker, Arch., 103 East 125th St., has plans ready for bids on two flat buildings on Edgecomb Ave., near 150th St., for Murray & Hill, 617 West 130th St. Cost, $84,000.

NEW YORK, N. Y.—Chas. E. Birge, Arch., 5 West 31st St., has plans for an apartment building at Riverside Drive and 86th St., for Ronald H. Macdonald & Co., 5 West 31st St. Brick and terra cotta, 12 stories, 200 × 102 ft. Cost, $700,000.

NEW YORK, N. Y.—The following bids were received by Board of Education, Nov. 13, for general construction, etc., of new public school No. 21 in Borough of Bronx: P. J. Walsh, 503 Fifth Ave., $107,700; Thos. Cockerill Son, 147 Columbus Ave., $107,013; Philip Wolf & Son, Staten Island, $97,703; Buckley Realty & Construction Co., 42d St. and Broadway, $103,128; Geo. Hildebrand, 38 Park Row, $96,788; C. H. Peckworth, 415 Hudson St., $101,329.

NEW YORK, N. Y.—Howells & Stokes, Archs., 100 William St., have plans in progress for new office building to be erected at 84-88 William St., for the Royal Insurance Co. of Liverpool, 50 Wall St. Brick, stone and terra cotta, fireproof, 18 stories, 70 × 80 × 100 × 100 ft. Heating, ventilating, electric elevator, 600 HP. boiler, 400 HP. of engines, 300 KW. of generators, etc., will all be included in the general contract.

The Broadway Savings Institution, care H. P. Hutchinson, 23 Park Place, will erect a $100,000 bank building at 5-7 Park Place. Stone and steel, fireproof, 2 stories, 35 × 100 ft. Architect will be selected Dec. 1, when all details will be available.

J. T. BRADY & CO., 4 East 42d St., has been awarded the general contract for alterations and addition to hotel at Broadway and 26th St., for J. Churchill, 1549 Broadway. H. C. Pittman, 156 Fifth Ave., is Arch.; W. C. Tucker, 156 Fifth Ave., is Sanitary Arch. Brick and stone, 4 stories, 25 × 100 ft.

C. O. Mailloux, 76 William St., has been appointed electrical engineer, and A. R. Wolff, 130 Fulton St., is steam engineer for new hotel to be erected at Fifth Ave. and 58th St., for the Plaza Operating Co., care B. Beineke, 111 Broadway. H. J. Hardenbergh, 1 West 34th St., is Arch. Brick, stone and terra cotta, fireproof, 18 stories, 201 × 250 × 125 ft. G. A. Fuller Co., 949 Broadway, are the general contractors. 1,200 HP. of boilers, 1,000 HP. of steam engines, 700 KW. of generators, electric elevators and motors will be required.

Schwartz & Gross, Archs., 35 West 21st St., have completed plans for $300,000 warehouse to be erected at Lafayette St. and North Leonard St., for Israel Lippman, 201 East 108th St. Brick and stone, fireproof, 8 stories, 90 × 100 ft. Boilers, heating, wiring, etc., will be included in the general contract.

Heins & La Farge, Archs., 30 East 21st St., want figures on electric wiring and switchboards for new residence to be erected at 9 East 68th St., for Mrs. G. T. Bliss, 37 West 25th St. Brick and stone, 6 stories, 50 × 100 ft. FOUNTAIN & CHOATE, 114 East 22d St., have the corpenter contract. Cost, $150,000.

J. F. HUGHES CO., 28 Elm St., has been awarded the contract for wiring for new telephone building in course of erection at Seventh St. and Park Ave., Hoboken, N. J., for the N. Y. & N. J. Telephone Co. Eidlits & McKenzie, Archs., 1123 Broadway. D. C. WEEKS & SON, 289 Fourth Ave., is the general contractor. Heating contract has not been awarded as yet.

HOBOKEN, N. J.—Bids are asked by Board of Education, Wm. A. Kerr, Secy., until 8 p. m., Nov. 27, for the erection of school building at Second and Monroe Sts. Eugene Ciccarelli, Arch., Second Nat'l Bank Bldg., Hoboken.

NEWARK, N. J.—Hooper & Co., Archs., 118 Market St., Newark, are taking figures on stable and warehouse to be erected at 20-22 Bridge St., Newark. Brick, 3 stories, 64 × 126 ft. and 1 story, 68 × 126 ft. Alderney Dairy Co., Division St., is the owner. Stable will accommodate 100 horses.

HARRISBURG, PA.—The Trustees of the Harrisburg State Hospital have let contract to CODER & MILLER, of Harrisburg, for the erection of two brick buildings, one for the confinement of dangerous women patients and another to be used as a women nurses' home, at their bid of $128,000.

LANCASTER, PA.—Edwin M. Hartman would like to receive sketches for a preparatory school building for Lancaster College, to cost $75,000.

PITTSBURG, PA.—MacClure & Spahr, Archs., Keystone Bldg., Pittsburg, have been chosen to design the 20-story building, 86 × 84 ft., of the Union National Bank, at Fourth Ave. and Wood St. Cost, $1,000,000. Bids will probably be taken about Jan. 1. Building Committee: John R. McCune, T. M. Armstrong and Nathaniel Holmes.

The Commonwealth Trust Co. is having competitive plans made for a 16-story office building, 96 × 84 ft., which it will erect on Fourth Ave. next spring. Cost, $800,000. John W. Herron, 327 Fourth Ave., is Pres.

BALTIMORE, MD.—Furness & Co. and McKim, Mead & White, 160 Fifth Ave., New York City, Assoc. Archs., have filed plans for two-story stone and steel Girard Trust building, which is to be erected at Broad and Chestnut Sts. at an estimated cost of $2,000,000.

BALTIMORE, MD.—The Russell Construction Co., builders, 17 East Saratoga St., will erect 20 two-story dwellings on Clifton Ave. to cost about $30,000.

The Municipal Board of Awards has awarded the contract for construction of an addition to No. 10 school at Hollins and Amity Sts. to MILTON C. DAVIS, 140 West Fayette St., the lowest bidder, for $34,380.

The Municipal Board of Awards will receive bids at the office of Harry F. Hooper, Cy. Register, City Hall, until 11 a. m., Dec. 6, for the construction of retail market and school, to cost about $200,000. Simonson & Pietsch, Archs., American Bldg.

ANNAPOLIS, MD.—Bids are asked by Truman H. Newberry, Act. Secy., Navy Dept., Washington, D. C., until 12 m., Dec. 20, for the foundation for first building, experiment station, Annapolis.

WASHINGTON, D. C.—The following bids were opened Nov. 8 at the office of the Superintendent, U. S. Capitol Building and Grounds, Washington, D. C., for electric lighting fixtures for the House and Senate wings, U. S. Capitol Building; (1) Senate wing; (2) House wing: Lawrence Gas Fixture Mfg. Co., Philadelphia, Pa., (1) and (2) $9,500; Lloyd-Garrett Co., Philadelphia, (1) $3,100, (2) $6,400; Horn & Brannan Mfg. Co., Philadelphia, (1) $5,200 or $5,475, (2) $4,300 or $4,025; Mitchell-Vance Co., New York City, (1) $5,650, (2) $3,815; Enos Co., New York City, (1) $5,290, (2) $4,210.

WASHINGTON, D. C.—Bids are asked by Elliott Woods, Supt., Capitol Bldg. and Grounds, until 2 p. m., Nov. 25, for laying rough brick work for office building of U. S. Senate.

WASHINGTON, D. C.—Plans and specifications will be issued by the District Commissioners the latter part of next week for the construction of one of two public convenience stations to be erected in Washington at a cost of $50,000. Plans for the other are also being prepared but will not appear for a month or two.

NORFOLK, VA.—Bids are asked by Bureau Yards and Docks, U. S. N., Washington, D. C., until 11 a. m., Dec. 9, for an electric elevator in storehouse for torpedo boat outfits at the U. S. Navy Yard, Norfolk. Specifications may be seen at office of Engineering News, 220 Broadway, New York City. Mordecai T. Endicott, Ch. of Bureau.

ELIZABETH, VA.—Bids are asked by B. A. Beeson, Treas. Southern Branch, N. H. D. V. S., National Soldiers' Home, Elizabeth, until 12 m., Dec. 4, for furnishing material and labor for plumbing buildings, Nos. 41 and 44, and for changing electric light wires in building No. 14.

RICHMOND, VA.—We are informed that the SOUTHERN CONTRACTING CO., Century Bldg., Norfolk, Wm. Pannill, Mgr., was awarded contract on Nov. 11 for fireproofing the new Jefferson hotel at Richmond, at a cost of $45,000.

SUMTER, S. C.—Edwards & Walter, Archs., Loan & Exchange Bank Bldg., Columbia, S. C., are preparing plans for court-house to be erected at Sumter for Sumter County.

CHARLESTON, S. C.—The St. Johns Hotel Co., capital $80,000, has been chartered here to erect a hotel. W. W. Lawton is Pres.

CHARLESTON, S. C.—We are informed that bids will be received by Frank P. Milburn, Arch., Columbia, S. C., until Nov. 20, for construction of new Union station and train shed for the Charleston Union Station Co.

HOMER, GA.—A fireproof jail will be erected here. Address T. F. Hill, County Ordinary, for information.

GRIFFIN, GA.—Capt. W. J. Kincald will erect a six-story office building here.

BRUNSWICK, GA.—C. A. Gifford & E. S. Belts, Archs., 18 East 17th St., New York City, have plans in progress for court-house to be erected at Brunswick for the city. Cost, $100,000.

JACKSONVILLE, FLA.—The Board Public Works rejected all bids for the erection of a city jail. Work will probably be done by day labor, under the supervision of Philip Prioleau, Cy. Engr.

GAINESVILLE, FLA.—Edwards & Walters, Archs., Columbia, S. C., are preparing plans for new buildings for the University of Florida, N. P. Bryan, Chn., Jacksonville. Cost, $1,500,000. Bids will be received about Nov. 24 for the first dormitory buildings.

MONTGOMERY, ALA.—Bids for a four-story Y. M. C. A. building will be received until Dec. 8. Frank Lockwood, Arch., First National Bank Bldg., Montgomery.

JACKSON, MISS.—Hicks Bros. will erect a five-story office building here.

NEW ORLEANS, LA.—Diboll & Owen, Archs., 217 Baronne St., are preparing plans for new house of worship for the First Methodist Church. Cost, $60,000.

NATCHITOCHES, LA.—Bids are asked by James Knox Taylor, Supervising Arch., Washington, D. C., until 3 p. m., Jan. 4, for construction complete of U. S. post-office at Natchitoches. (Advertised, Engineering News.)

MEMPHIS, TENN.—Work will be started this week tearing down buildings on site for new Business Men's Club. Contract has not yet been let. Shaw & Pfeil, Archs. Cost, $150,000.

MEMPHIS, TENN.—John Gaisford, Arch., 452 Randolph Bldg., has plans and will receive bids for five-story business college, 50 × 75 ft., for Macon & Andrews. Cost, $70,000.

Alsup & Woods, Archs., have about completed new set of plans and will be ready for bids within a short time for the Goodwyn Institute. Brick and stone, 7 stories, 75 × 100 ft. Cost, $250,000.

LOUISVILLE, KY.—The Board of Directors of the Lincoln Savings Bank has adopted plans of Kenneth McDonald and W. J. Dodd, Archs., Equitable Bldg., for a 12-story bank and office building, 51 × 52 ft., to be erected at Fourth and Market Sts. Work to begin about Jan. Cost, $150,000.

CLEVELAND, O.—The Art Gallery Commission, composed of Henry Raney, J. Wade and Dean Holden has had competitive sketches prepared for an art gallery, to cost $500,000.

CLEVELAND, O.—A. A. French, Arch., Cuyahoga Bldg., Cleveland, is preparing plans and will be ready for figures in about ten days for a four-story hotel apartment building, 40 × 125 ft., for the Excelsior Improvement Co. S. E. Dettelbach, Mgr., Williamson Bldg.

LORAIN, O.—Searles, Hirsh & Gavin, Archs., Schofield Bldg., Cleveland, have made plans and have taken figures for bank building to be erected at Lorain, for the Cleveland Trust Co., Cleveland. Cost, $50,000.

TOLEDO, O.—Bacon & Huber, Archs., 755 Spitzer Bldg., Toledo, have been asked to make preliminary sketches for hotel, to take the place of the Boody House, at Madison and St. Clair Sts. A. M. Woolson, of the Woolson Spice Co., is a member of company owning house, and he states that work on new structure will begin next spring. Cost, $700,000.

LAFAYETTE, IND.—J. F. Alexander & Son are preparing plans for building for Y. M. C. A., C. B. Jamison, Secy. Cost, $80,000.

MONTICELLO, IND.—Bids are asked by W. S. Bushnell, Secy. School Bd., until 7 p. m., Dec. 6, for the erection of a school building. Chandler & Park, Archs., 400 Main St., Racine, Wis.

INDIANAPOLIS, IND.—Maennerchor Hall Association has filed articles of incorporation with a capital of $120,000. The association will erect a large building, for which Adolph Scherrer, Arch., is preparing the plans. Gustav W. Kevers is one of the directors.

INDIANAPOLIS, IND.—Bids will be taken by Vonnegut & Bohn, Archs., Indiana Trust Bldg., on the finishing work on the Methodist hospital, at 16th and Capitol Ave. The work will amount to $60,000.

MUNCIE, IND.—The Mutual Home Savings Association will ask for bids until Dec. 1 for the construction of a bank and apartment building. Alfred Grindle, Arch., Johnson Blk., Muncie.

JACKSON, MICH.—Claire Allen, Arch., 24 Dwight Blk., Jackson, has prepared plans for the construction of high school building at a cost of $101,000.

MOUNT PLEASANT, MICH.—Bids are asked by C. F. Larrabee, Act. Comr., Indian Affairs, Washington, D. C., until 2 p. m., Dec. 7, for furnishing and delivering necessary materials and labor required to construct and complete an employes' quarters, superintendent's quarters, dairy building and industrial building, all with plumbing, steam heat and electric light. Robt. A. Cochran, Supt., Mount Pleasant.

DETROIT, MICH.—The Detroit Scenic Railway Roller Coaster & Amusement Co., A. V. Rothwell, Secy., 501 Chamber of Commerce Bldg., have purchased Recreation Park, upon which it will build a pavilion, 200 ft. long, with two club houses, a grand stand to seat 4,000, a scenic railway, an electric tower, 175 ft. high, with 1,500 incandescent lamps, dancing pavilion, 60 × 80 ft., an amphitheatre, 200 × 200 ft., also race track and stables, etc. Cost, $100,000.

CHICAGO, ILL.—Patton & Miller, Archs., 140 Dearborn St., are preparing plans for college building to be erected at Huron, S. Dak., for Huron College. Bids will be received by architects about Dec. 1. Cost, $125,000.

W. H. Pruyn, Jr., & Co., 4217 Berkley Ave., have completed plan for an apartment building to be erected at 1921-7 Wrightwood Ave., for Geo. W. Williams. Architect is receiving estimates on separate contracts. Cost, $115,000.

MILWAUKEE, WIS.—Van Ryn & De Gelleke, Archs., 211 Grand Ave., will prepare plans for a three-story state normal school building, 200 × 200 ft., for the State Board, Frederick Schuler, local representative, 545 29th St. Cost, $160,000.

FAIRMONT, MINN.—Sealed proposals will be received by H. P. Edwards, County Audr., until 3 p. m., Dec. 12, for the erection of a two-story and finished basement stone and brick court-house. Bell & Detweiler, Archs., Minneapolis.

ST. PAUL, MINN.—Bids were opened Nov. 10 at the office of Jas. Knox Taylor, Supr. Arch., Washington, D. C., for the installation of passenger elevator in the U. S. public building at St. Paul. Bids were as follows: Marine Engine & Machine Co., 126 Liberty St., New York City, $5,383; Otis Elevator Co., 17 Battery Place, New York City, $4,980; Brodesser Elevator Mfg. Co., Milwaukee, Wis., $5,265.

ST. PAUL, MINN.—The Auditorium Commission has formally appointed Reed & Stern architects for the St. Paul Auditorium. The structure will be made fireproof. By the agreement the building is to cost not less than $225,000 and not more than $265,000.

ST. PAUL, MINN.—The Y. M. C. A. will erect a six-story structure. Cost, $300,000. About $100,000 has already been raised. Edward Grace is Secy.

OMAHA, NEB.—John Latenser, Arch., Bee Bldg., Omaha, is preparing plans for extension to Iler Hotel, to cost $200,000.

DEADWOOD, S. DAK.—[illegible] for the erection of a court-hou[illegible] County has been let to M[illegible] of Deadwood, for $71,322. [illegible] Archs., Minneapolis.

ST. LOUIS, MO.—D. C[illegible] a residence at a cost of $[illegible] Stewardson, Archs., Securit[illegible]

KANSAS CITY, MO.—M[illegible] Archs., 164 Dearborn St., [illegible] preparing plans and will be [illegible] in about one month for [illegible] theatre, 80 × 142 ft., for [illegible] Dwight Bldg., Kansas City.

BOLIVAR, MO.—R. G. K[illegible] tury Bldg., St. Louis, Mo., [illegible] court-house at Bolivar for [illegible]

ST. LOUIS, MO.—The Mer[illegible] will erect a modern busin[illegible] company also reports that [illegible] building will be erected at [illegible] Pine Sts.

DALLAS, TEX.—The plans [illegible] Greene, Archs., North Texas [illegible] have been accepted for the [illegible] Cathedral, which will cost $[illegible] P. Cochran is Chn. Bldg. Com.

DALLAS, TEX.—H. A. O[illegible] 249 Main St., has plans for [illegible] basement building, 70 × 370 [illegible] Trinity College. Cost, $150,000.

DALLAS, TEX.—Earle H. [illegible] 266 Main St., Dallas, has prepared plans for six-story hotel for Lucas [illegible] $300,000.

GUTHRIE, OKLA.—Bosworth, [illegible] Co., of Wichita, Kan., were the lowest bidders, at $4,048, for heating apparatus for U. S. post-office at Guthrie. Bids were opened Nov. 7 by Jas. Knox Taylor, Supv. Arch., Washington, D. C.

SHAWNEE, OKLA.—W. Angelo Powell, Arch., Ballinger Bldg., St. Joseph, Mo., has prepared plans for a three-story building, 125 × 84 ft., for the Shawnee Normal University. Cost, $75,000.

STILLWATER, OKLA.—A. O. CAMPBELL, Oklahoma City, was awarded the general contract, except heating and plumbing, for the erection of Morrill Hall for the Oklahoma Agricultural and Mechanical College, at his bid of $63,800. S. A. Layton, Arch., El Reno, Okla.

FRESNO, CAL.—This city has voted in favor of the issuance of $75,000 bonds for a new city hall. I. Tellman is Cy. Engr.

RENO, NEV.—Bids are asked by Jas. Knox Taylor, Supv. Arch., Washington, D. C., until 3 p. m., Jan. 10, for construction complete of U. S. post-office at Reno.

WALLACE, IDAHO.—Stritesky & Sweatt, Archs., 106 Jamieson Bldg., Spokane, Wash., are preparing plans for four-story hotel, 100 × 100 ft., to be erected at Wallace. Cost, $40,000.

GUELPH, ONT.—A new armory is to be erected here at a cost of $125,000.

HAMILTON, ONT. — THE CANADIAN WHITE CO., of Hamilton, has received the contract for constructing an eight-story building here for the Federal Life Assurance Co.

TORONTO, ONT.—The contract for new barracks here has been let to SULLIVAN & LANGDON, of Kingston, Ont. Cost, $225,000.

WATER SUPPLY—IRRIGATION.

The names of parties awarded contracts are printed in capital letters.

BRUNSWICK, ME.—We are informed that municipal water-works may possibly be extended next year to Topsham. Plans and estimates have been made and work would require some three miles of 6-in. to 14-in. cast iron pipe, new covered reservoir of concrete, valves, hydrants, etc. Freeman C. Coffin, Exchange Bldg., Boston, Mass., is Des. Engr.; Chas. L. Bowker, Supt. W. W., is official in charge.

ST. JOHNSBURY, VT.—Village has again voted against adding filter system to municipal water-works.

AUBURN, N. Y.—Bids are asked by Water Board, J. Lewis Grant, Supt. W. W., until 1 p. m., Dec. 6, for furnishing about 1,500 lin. ft., 36-in. wrought iron intake pipe, with about 14 flexible or ball and socket joints attached. (Advertised, Engineering News.)

WATERLOO, N. Y.—We are advised that nothing will be done until next spring toward projected extension of mains of Water Works Co., to Seneca Lake, seven miles distant. Est. cost is $100,000. C. H. Ross is Supt. W. W.

BOLIVAR, N. Y.—Bolivar Water Co. is stated to be preparing to increase its water supply by boring artesian wells.

NEW YORK, N. Y.—Bids were opened Nov. 8 by John T. Oakley, Comr. Water Supply, Gas and Electricity, for furnishing, delivering and laying water mains in Columbus and Ninth Aves., 62d St., Central Park West, and in Central Park. F. Y. Smith Contracting Co., 147 East 125th St., New York, at $450,450, being lowest bidder. For itemized bids see under Contract Prices.

NEW YORK, N. Y.—Following bids were opened Nov. 8 by John T. Oakley, Comr. Water Supply, Gas and Electricity, for furnishing, delivering, erecting and connecting four water-tube boilers at the new Ridgewood pumping station: R. J. T. Gerstle, 44th St. and First Ave., $29,297; Heine Safety Boiler Co., 11 Broadway, $28,800; Frank McSwegan, Dover St. and Franklin Sq., $31,900; Babcock & Wilcox Co., 85 Liberty St., $31,750; Stirling Consolidated Boiler Co., $29,500.

NEW YORK, N. Y.—Thos. O. C. Sloan, contractor, 76 William St., New York, has awarded contract for making 350 6-in. connections to 20-in. and 30-in. mains, to the WATER-WORKS EQUIPMENT CO., 15 Broadway, New York. The connections which are to be made without shutting off the water, are to be used to locate new hydrants in various parts of the Borough of Brooklyn.

YONKERS, N. Y.—Crestwood Water Co., capitalized at $[illegible],000, has been incorporated. Harry B. Min[illegible], New York, and Wm. R. Watson, Yonk[illegible], are Directors.

NEW YORK, N. Y.—Bids are asked by John T. Oakley, Comr. Water Suply, Gas and Electricity, until 2 p. m., Nov. 29, for furnishing, delivering and laying water mains in sev[illegible] streets, Boroughs of Manhattan and The Bronx. Time allowed for completion of work is 150 working days.

CAMDEN, N. J.—Bids are reported asked by Joseph Potter, Chn. Water Dept., P. O. Box 842, until [illegible] p. m., Nov. 21 (extension of time) for complete installation of an air compressor, foundation and building for same.

PHILADELPHIA, PA.—Following bids were opened Nov. 3 by A. Lincoln Acker, Dir. Pub. Wks., for ten new boilers for Belmont Pumping Station: I. P. Morris Co., $43,000, 3½ months; E. Keeler Company, $51,000, 3 months; Coatesville Boiler Works, $39,000, 5 months; Harlan & Hollingsworth Co., $46,550, 6 months. For electrical supplies for Lardners Point Pumping Station the following bids were received: Vallee Brothers Electrical Co., $4,305; Dollier Engineering Co., $4,482; Mayer & Englund Co., $4,260.

WASHINGTON, D. C.—The Secretary of the Interior has awarded a contract to WOOD, BANCROFT & DOTY, Omaha, Neb., for the construction and completion of the earth embankment in connection with the Hondo Irrigation Project, New Mexico. Their bid for the work was $36,908.

NORFOLK, VA.—City Water Board proposes to enlarge coagulating basin at waterworks, at a cost of about $25,000.

NORFOLK, VA.—Bids were opened Nov. 10 at office of Quartermaster, U. S. Marine Corps, Washington, D. C., for installation of sewer system for U. S. Marine Corps and officers' quarters, Norfolk, Va. Specifications were issued in two forms: Modified Contract (modifying general specifications for Marine Hospital and Officers' Quarters, date of Sept. 23, 1904) and Additional Work. The Modified Contract contains six sections: Sec. 1, city water supply; Sec. 2, drinking water system; Sec. 3, drainage system; Sec. 4, electric work; Sec. 5, heating work; Sec. 6, mason work. Additional Work contains also six sections: Sec. 1, city water supply; Sec. 2, fire lines; Sec. 3, main sewer; Sec. 4, electric work; Sec. 5, mason work; Sec. 6, refrigeration plant. The bids were as follows: Penn Bridge Co., Beaver Falls, Pa., Additional Work, $19,590; Modified Contract, $11,900; if 6-in. cast-iron pipe be used instead of 10-in. in Sections 1 and 2 of Additional Work, deduct $900; if transformers must be used in electric work, add $200. McKay Engineering Co., Baltimore, Md., Additional Work, Sec. 1, $1,680; Sec. 2, $5,980; Sec. 3, $5,725; if 6-in. pipe is used instead of 10-in., deduct $1,000; compressors of the belt type will be furnished, but not with motors. Newport News Plumbing, Heating & Tinning Co., Newport News, Va., Additional Work, Secs. 1, 2, 3, 4 and 5, $17,963; 6-in. pipe instead of 10-in. and 8-in., deduct $1,125; if compressors are omitted, deduct $900; if gravity sewer system is used, deduct $2,127; if transformers are used, add $800; Sec. 6, $2,200, but will not take contract for 6 without all.

PARKERSBURG, W. VA.—Referring to construction of water-works here, we are informed that test well has been sunk and successful results obtained. A bond issue will be asked and if obtained, as is likely, an entire new system will be put in. G. L. McKibben, Van Wert, O., is Engr.; W. A. Elletson is Pres. Bd. Affairs.

BREVARD, N. C.—See under Sewerage.

HARTSVILLE, S. C.—See under Sewerage.

GEORGETOWN, S. C.—Company capitalized at $150,000 is to be organized to put in water-works here, according to reports.

COLQUITT, GA.—Town has voted to issue $6,000 of bonds for constructing water-works. N. L. Stapleton is Mayor.

TIFTON, GA.—City votes to issue $20,000 of bonds for constructing water-works.

TOCCOA, GA.—Committee, Geo. T. Brown, Member, has been appointed to investigate matter of installing water-works by this place.

ADAIRSVILLE, GA.—City has awarded engineering contract for new municipal waterworks to J. B. McCrary, Senoia, Ga. Plans and specifications will be prepared at an early date, and bonds will be voted later. Supply is to be from spring, and est. cost of works is $20,000.

WATKINSVILLE, GA.—A. C. Jackson, David Osborn, A. W. Ashford and associates are to construct water-works, according to reports.

PERRY, FLA.—Bids are asked by Mayor and Board of Aldermen until 2 p. m., Nov. 28, for material and labor for construction of water-works, requiring approximately 191 tons, 4-in., 6-in. and 8-in. cast-iron pipe, and 4½-tons special castings, 34 fire hydrants, 29 valves and 20 valve boxes, steel tower and tank, and foundations for same, and laying pipe. H. S. Jaudon, Engr., Quitman, Ga.; W. F. Hendry, Mayor. (Advertised, Engineering News.)

ABBEVILLE, ALA.—J. B. McCrary, Senoia, Ga., is to prepare plans and specifications for water-works for this place, for which $20,000 bond issue was voted recently.

BRIGHTON, ALA.—Town Council has been considering proposition of Adler & Co., Bessemer, Ala., for installation of water-works and sewerage. It is also reported that Birmingham (Ala.) Water-Works Co. has asked a franchise here.

GUNTERSVILLE, ALA.—The Mayor writes us that city proposes to install water-works at a cost of about $5,000.

JACKSON, MISS.—Council and local water company have been in conference for purpose of agreeing on a price for the plant, with a view of municipal ownership. Some time ago city voted to issue $250,000 of bonds for purchasing or constructing works, but nothing definite has been done.

BILOXI, MISS.—City will vote Dec. 5 on issuing $15,000 additional water bonds.

LAWRENCEBURG, TENN.—We are advised that plans have not been completed as yet for proposed water and light plant for this place, for which a $25,000 bond issue was recently voted. Jas. T. Dunn, Cy. Secy.

BRISTOL, TENN.—An election has been ordered for Dec. 5 to vote on proposed purchase of King Water-Works system, which was made by council some weeks ago, subject to ratification. Purchase price is $150,000. A $250,000 bond issue for water-works will also be voted on.

TOLEDO, O.—Bids were opened Nov. 6 (readvertisement) by Board Public Service, Harry Jones, Secy., for constructing Secs. 1 and 2 of filtered water conduit, the lowest bidder being A. Bentley & Sons, 419 Madison St., Toledo, O. His bid was as follows: Sec. 1, Contract 2, tunnel method, tile lining, $59,245; time, 200 days. Sec. 2, Contract 3, tunnel method, tile lining, $40,600; time, 100 days. Chas. L. Parmelee, 136 Liberty St., New York, is Consult. Engr. See under Contract Prices.

WARREN, O.—Matter of city's purchasing local water and light plants is agitated.

CLEVELAND HEIGHTS, O.—The Water-Works Construction Co., Citizens Bldg., Cleveland, O., has been awarded contracts amounting to $51,437 for water mains, etc., in various streets of this place. Work has been started.

CONNERSVILLE, IND.—As a result of recent municipal election, it is said that steps will be taken to secure a new water supply.

MUSKEGON HEIGHTS, MICH.—Council has appointed committee to secure estimate of cost of putting in water-works.

WYANDOTTE, MICH.—City has voted to issue $24,000 of bonds for completing water system.

CROSWELL, MICH.—We are advised that a standpipe, engine, heater and boiler are wanted for proposed water-works extension. Est. cost is $9,000. The Mayor is official in charge.

IRON RIVER, MICH.—Village has voted to bond for $30,000 for installing water-works and electric light plant.

CHICAGO, ILL.—Bids are asked by Department Public Works, J. M. Patterson, Comr., until 11 a. m., Nov. 23, for constructing and erecting sluice gates and machinery at Lawrence Ave pumping station.

PORT WASHINGTON, WIS.—We are advised that it will be some weeks before anything definite is done regarding water-works and electric plant for this place. Plans and specifications for the work have not been accepted as yet. The bonds for the work have been dated March 1, 1906. Wm. A. Tholen is Cy. Clk.

INDIANOLA, IA.—Local parties have purchased land near here; they plan to build a storage reservoir and pipe water to this place.

MADRID, IA.—Chicago, Milwaukee & St. Paul Ry., W. E. Wood, Division Engr., Marion, Ia., is said to be preparing to build a 10,000,000 gallon reservoir near here to supply its main line. Pumping plant would be necessary.

FRANKLIN, NEB.—Council Committee has been appointed to secure information looking to establishment of city water-works.

HAMILTON, MONT.—The Blodgett Creek Reservoir Co. is planning for the construction of large reservoirs to preserve the waters of Blodgett Creek. Dams will be built below Camp Comfort and the waters stored will be used to supply water during the dry season to large tracts on west side of the valley. Work is to commence this fall and water to be ready by season of 1907.

ST. LOUIS, MO.—Council has passed bill appropriating $285,000 for extension of the water service in the city.

EUREKA SPRINGS, ARK. — Eureka Springs Water Co., capitalized at $50,000, has been incorporated in Oklahoma, with Clark C. Hudson, Oklahoma City, as territorial agent. Incorporators are M. T. Gear, John J. Jones and F. M. Claflin.

OSCEOLA, ARK.—Plans and specifications are nearly completed for water-works for this place. Est. cost is about $30,000. W. E. Ayres, Room 10 Odd Fellows Bldg., Memphis, Tenn., is Engr.

WHITESBORO, TEX.—Col. M. P. Kelly, Gainesville, Tex., has been granted franchise to put in water-works here. Works will cost about $40,000, and franchise calls for 2½ miles of mains and 100 ft. high, 12 ft. diameter stand pipe.

FORT WORTH, TEX.—Contract for air compressor plant for city water-works (bids opened Oct. 14) has been let to LAIDLAW-DUNN-GORDON CO., St. Louis, Mo., for $35,464.

OKLAHOMA CITY, OKLA.—An election will be held some time this month to vote on issuing $450,000 of bonds for improvements to water-works and sewer system.

DAVIS, IND. T.—Bids are asked by this town, J. R. Clemmons, Mayor, until noon Nov. 28, for furnishing materials and constructing water-works. Work includes a 35-ft. deep, 10-ft. diameter well, a pump pit, power house, compound duplex pumping engine of 400 gallons capacity per minute, tubular return flue type boiler, water heater, duplex boiler, feed pump, 40 two-way post fire hydrants, two 8-in., four 6-in. and eight 4-in. double gate valves, 4,000 ft. 8-in., 4,000 ft. 6-in., and 12,000 ft. 4-in. standard cast-iron mains and five tons special castings, and 50,000-gallon steel tank, mounted on 110-ft. steel tower. W. P. Bullock, Engr.

BOULDER, COLO.—Special election has been ordered for Dec. 19 to vote on approving city's purchase of Silver Lake. An additional bond issue of $75,000, supplementing the bond issue authorized at the general election last spring for $75,000 will also be voted on. Part of this issue will be used for a pipe system. Eugene Wilder is Cy. Clk.

BRIGHTON, COLO.—City votes to issue $12,000 of bonds, $8,000 of which are for purchase of local water-works, and remainder for extensions and improvements of the system.

TRINIDAD, COLO.—Surveys have been started for pipe line which is to convey mountain water to this city. Project will cost about $250,000.

DENVER, COLO.—Bids were opened Nov. 8 by U. S. Reclamation Service for construction of main canal of Interstate Canal, North Platte Project, Nebraska, the two lowest bidders on each division being as follows: (1) Deadwood Construction Co., (2) Robinson & Maney, St. Louis, Mo.; (3) James O'Connor, Mitchell, Neb.; (4) The Burke Construction Co., St. Louis, Mo.: Division 1, (1) $53,271, (2) $57,140; Division 2, (1) $54,395, (2) $62,540; Division 3, (1) $42,900, (2) $72,740; Division 4 (1) $45,645, (2) $52,340; Division 5, (1) $42,045, (2) $44,440; Division 6, (3) $77,360, (4) $79,640; Division 7, (4) $76,240, (1) $80,745; Division 8, (1) $44,400, (2) $49,040. Itemized bid of Deadwood Construction Co. is given under Contract Prices.

PUEBLO, COLO.—Mayor West has appointed committee, Gust Krenzke, Chn., to investigate and report on securing supply from water shed in Greenhorn Range.

CENTRALIA, WASH.—Centralia Water Co. is stated to be having plans made for improving its works, by sinking new wells, enlarging reservoir and installing pump.

LYNDEN, WASH.—Water-works may be installed here.

NORTH YAMHILL, ORE.—Company is being organized to put in $10,000 system of water-works here.

LOS ANGELES, CAL.—Southern Water Co. has been incorporated to do business in this city. Edward S. Shattuck, D. J. Desmond, W. J. Nimmo, Carroll Allen and L. A. Crandall, all of Los Angeles, are incorporators.

HANFORD, CAL.—Hanford Water-Works Co. is stated to be having plans made for enlarging its plant.

SAN FRANCISCO, CAL.—Rubicon Water & Power Co., capitalized at $1,000,000, has been incorporated by A. S. Macdonald, G. S. Wall, R. A. Jackson, Geo. C. Davis and H. D. Jerrett.

SEBASTOPOL, CAL.—City Trustees have awarded contract for constructing water and sewer systems to R. C. MATTINGLY, San Francisco, Cal., for $29,000.

PHOENIX, ARIZ.—We are advised that $300,000 of city bonds have again been sold to W. R. Todd & Co., Cincinnati, O. Election for mayor will take place in 90 days, and after that action toward complete new plant, reconstruction or purchase of private plant, will be taken.

OGDEN, UTAH.—Utah Light & Railway Co., Salt Lake City, Utah, has petitioned County Commissioners for permission to build a storage reservoir to store flood waters of Ogden River. Reservoir would be large enough to contain 2,000,000,000 cu. ft. of water and capable of irrigating 2,700 acres of land. Company proposes to build dam at main head of Ogden Canyon.

SALT LAKE CITY, UTAH.—The Dry Gulch Irrigation & Improvement Co., of Denver, Colo., has filed application for 200 second ft. of water from Lake Fork Creek, a branch of the Green River, to irrigate 12,000 acres of reservation lands through a 3-mile canal.

BOISE, IDAHO.—Advices from this city state that the Boise Artesian Hot & Cold Water Co. will sink new wells and run new subterranean chambers to increase the water supply. Cost of improvements, including an additional pumping plant, is estimated at about $15,000.

GRANGEVILLE, IDAHO.—Franchise for water-works is to be asked here by A. W. Talkington, Frank McGrane and Even Evans, all of Grangeville. Proposed to install a gravity system; water will be piped from mountains three miles away, and will be carried through the city in 10-in. mains. Cost will be from $30,000 to $50,000.

ST. FELICIEN, QUE.—Town contemplates construction of water-works and electric light plant next spring.

AMHERST, N. S.—Matter of adopting scheme for a gravity system to replace present pumping system for the water-works is under consideration. Estimated that cost would amount to about $180,000.

VANCOUVER, B. C.—Bids are asked by A. McEvoy, Cy. Clk., until Dec. 13, for supplying brass goods, lead pipe and galvanized pipe and fittings for water-works department.

SEWERAGE.

The names of parties awarded contracts are printed in capital letters.

MARION, MASS.—Town has voted to appropriate $20,000 for the construction of sewer system. Wm. A. Andrew is Selectman.

LENOXDALE, MASS.—Sewer Commissioners are having surveys made for proposed sewer system. Matter of disposing of sewage is presenting some difficulties; as it cannot be dumped into Housatonic River, disposal fields may have to be built.

NEWARK, N. Y.—We are advised that the engineer has not finished plans for the sewers which are to be laid next year. Plans must be submitted to State Board before anything else can be done. R. A. S. Bloomer is Member Municipal Board.

NEPTUNE CITY, N. J.—Neptune Township Committee have been discussing ways and means for establishment of sewer system for that municipality. Post-office is Avon-by-the-Sea.

MERCHANTVILLE, N. J.—Surveys and estimates are to be prepared for sewer system for this place. D. E. Hill, 156 Fifth Ave., New York, is Des. Engr.; A. W. MacCullum is Chn. Sewer Com.

BRISTOL, PA.—Bids will be received on Dec. 20 for a separate system of sewerage and a sewerage disposal plant. Bidders are required to visit Bristol and submit general plans with their bids. Joseph R. Grundy, Chn. Borough St. Com. (Advertised, Engineering News.)

STOWE, PA.—Bids are asked by R. J. Maconbray, Township Clk., 2 Frazier Ave., McKees Rocks, Pa., until 8 p. m., Nov. 27, for construction of 1,280 ft. 36-in. brick or D. S. terra cotta pipe sewer; 3,000 ft. 12-in. terra cotta pipe sewer; 1,110 ft. 24-in. D. S. terra cotta pipe sewer, nine manholes, six sewer drops and one lamphole. S. L. Gardner, Township Engr., Chartiers and Linder Aves., McKees Rocks, Pa.

WILMINGTON, N. C.—Wilmington Sewerage Co. is contemplating extending sewers to Queen St. and vicinity.

BREVARD, N. C.—Bids are asked until Nov. 20 for constructing sewers and water lines as follows: Furnishing all material and laying 7,000 ft. of 8-in., 5,800 ft. of 6-in. and 75 ft. of 15-in. terra cotta pipe; also furnishing all material and laying 5,500 ft. of 4-in. water pipe; 16 fire hydrants, 5 4-in. gate valves, 2 6-in. gate valves and 7 valve boxes. A. K. Orr, Cy. Secy.

TIFTON, GA.—City has voted to issue $10,000 of bonds for a sewer system.

HARTSVILLE, S. C.—Bids will probably be taken in February or March for constructing sewer system and water-works for this place. Est. cost is $57,000. Charles C. Wilson, Columbia, S. C., is Engr.

GULFPORT, MISS.—Bids are asked by P. F. Martin, Cy. Clk., until noon, Nov. 22, for construction of Sec. 4 of the sewer system, comprising about one mile 16-in. outfall and 1½ miles terra cotta piping, necessary manholes, etc. W. F. Wilcox, Engr., Jackson, Miss. (Advertised, Engineering News.)

SPRINGFIELD, TENN.—Recently organized Springfield Sewerage Co. has awarded contract for putting in sewerage to T. J. MOONEY & CO., Nashville, Tenn.

CHATTANOOGA, TENN.—Bids were opened Nov. 7 by Board Public Works, Robt. Hooke, Cy. Engr., for constructing sewers, the contract being awarded on Nov. 10 to GUILD & CO., Chattanooga, Tenn., for $74,704. See under Contract Prices for itemized bids.

GEORGETOWN, KY.—We are advised that surveys will be commenced some time this month for the proposed sewer system for this city, for which a bond issue has been sold. Profiles and specifications will cover 3½ miles of sewers. John W. Alvord, 1207 Hartford Bldg., Chicago, Ill., is Des. Engr. J. W. Keller is Mayor.

CLEVELAND HEIGHTS, O. — THE WATER-WORKS CONSTRUCTION CO., Citizens' Bldg., Cleveland, O., has been awarded contracts, amounting to $27,079, for construction of sewers in this place. Work has been started.

COLUMBUS, O.—Bids were opened Nov. 2 by Board Public Service, Julian Griggs, Ch. Engr., for constructing sewage purification works. Sullivan, Murphy & Miles, Columbus, O., at $435,541, are the lowest bidders.

NAPOLEON, O.—Bids were opened Nov. 6 by F. W. Hilgendorff, Village Clk., for constructing pipe sewers in Park St. and Welstede St., contracts being awarded as follows: HENNESSEY & CO., Napoleon, $3,313; PONTIUS & RIEGER, Napoleon, $1,431.

ST. BERNARD, O.—Following bids were received Nov. 8 by George Meyer, Village Clk., for constructing sewers: Thos. P. Strack, Cincinnati, O., $7,747; Frank Broeman, 3925 Lewellyn Ave., Cincinnati, O., $7,357. Post-office is Station 17, Cincinnati.

CINCINNATI, O.—Plans and estimates for the construction of the Millcreek sewer have been submitted to the Board of Public Works. The sewer is to be 6.31 miles long, with a 6-ft. diameter at the upper end and a 7-ft. 9-in. diameter at the outlet into the Ohio River. Sewer is to be circular in section and is to be constructed of brick with a vitrified brick invert. Est. cost is $910,000. J. E. Breen is Cy. Engr.

SOUTH BEND, IND.—Board Public Works has adopted resolution in favor of trunk sewer in Kenwood Ave. and Meade St., from Johnson St. to Linden Ave.

GRAND RAPIDS, MICH.—Contract for constructing sewer in Adams St. from Madison Ave. to East St. has been let to FREDERICK GILNER, 451 Grandville Ave., Grand Rapids, for $9,704.

ARMADA, MICH.—Village authorities are preparing to build a sewer system.

HIGHLAND PARK, ILL.—James Anderson, Jr., Lake Forest, Ill., is preparing plans and specifications for about three miles of pipe sewers for this village.

LIBERTYVILLE, ILL.—Plans and specifications for septic tank and about five miles of pipe sewers for this village are now being prepared. James Anderson, Lake Forest, Ill., is Engr.

LAKE FOREST, ILL.—Plans and specifications are under way for about two miles of pipe sewers for this place. James Anderson, Jr., Village Engr., is Des. Engr.

DIXON, ILL.—Contract for constructing West End sewer system has been let to DAILEY & JOHNSON, Jacksonville, Ill., for $16,908.

MILWAUKEE, WIS.—Contract for building Sec. 4 of relief sewer for 30th St. tunnel has been let to CHARLES FORRESTAL, 235 15th St., Milwaukee, Wis., for $20,192. Sewer is to be 3,195 ft. long and 5 ft. in diameter.

CLINTON, IA.—We are advised that contract for constructing sewers in District No. 4 (bids opened Oct. 25) has been let to PEOPLE'S CONSTRUCTION CO., Davenport, Ia., for $168,724. Chas. P. Chase, Cy. Engr. See under Contract Prices.

BELLEFOURCHE, S. DAK.—Bids are asked by City Council, A. H. Maxwell, Cy. Audr., until noon, Nov. 20, for construction of 1,700 lin. ft. 18-in. vitrified pipe sewer and appurtenances, with 6-in. Ys.

WINNEBAGO CITY, MINN.—Surveys are reported under way for sewers for this place.

HELENA, MONT. — City Engineer Helmick is to prepare estimates of cost of constructing sewer to replace old Last Chance flume.

LOUISIANA, MO.—Louisiana Water-Works Co., which was recently granted new franchise is said to contemplate installing sewer system.

WHITESBORO, TEX.—Col. M. P. Kelly, Gainesville, Tex., who was recently granted water-works franchize here, will also put in a sewer system.

FORT WORTH, TEX.—Contract for constructing sewerage in the Fifth, Sixth, Seventh, Eighth and part of Second Wards has been awarded to McQUATTERS PLUMBING & MACHINE CO., Hillsboro, Tex., and W. W. COOK & SONS, Junction City, Kan. Approximate cost is $75,000.

TACOMA, WASH.—Council has passed resolution providing for the construction of sewers in Improvement District No. 152, Est. cost, $22,730; Improvement Dist., 154, Est. cost, $9,767; Improvement Dist. 153, Est. cost, $26,965.

NORTH YAKIMA, WASH.—Contract for constructing new trunk sewer system is stated to have been let to PATRICK MULLEN, for $40,204.

MOUNT VERNON, WASH.—Town Council has been petitioned to take preliminary steps for installing sewer system.

TACOMA, WASH.—Council has set aside $55,000 for the construction of a sewer in the 6th Ward.

ST. JOHNS, ORE.—City proposes to construct sewer system for business district at an est. cost of $3,887. W. W. Goodrich is Cy. Engr.

GRANTS PASS, ORE.—Contract for constructing sewers in Second and Seventh Sts. (bid opened Oct. 20) has been let to SIMON KLOVERDAHL, Eugene, Ore., for $15,512.

HOULTON, ORE.—Town is considering question of sewerage.

FRUITVALE, CAL.—Owing to recent bond election being illegal, Sanitary Board of Melrose District has called another election. It is proposed to expend $31,000 for the sewers.

REDDING, CAL.—City has disposed of $145,000 bond issue, proceeds of which will be used for sewer and street improvements and a new city hall.

GOLDFIELD, NEV.—Company has been formed here to install sewer system. L. L. Patrick, John S. Cook and Chas. F. Pugh are interested.

HALIFAX, N. S.—City proposes to construct by day labor about four miles of concrete block sewers. Est. cost is about $150,000. F. H. Doane is Cy. Engr.

GARBAGE DISPOSAL.

The names of parties awarded contracts are printed in capital letters.

PROVIDENCE, R. I.—We are advised that, under the present law, the city cannot award contract for garbage disposal for more than one-year term. Further authority has been asked. Charles V. Shapin is Supt. of Health.

LEXINGTON, KY.—Potter's Field, on East Seventh St., has been sold by city for $15,800. This sum will be used to build a municipal crematory or garbage incinerator. Steps will be taken at once.

DETROIT, MICH.—Bonds for $100,000, which will be issued for municipal garbage plant, may also be used to provide for garbage collection. Noted last week.

ST. LOUIS, MO.—An ordinance has been introduced in the municipal assembly providing an appropriation of $75,000 for construction of an incinerating plant on block bounded by Smith, Dickson and Lewis Sts. and city wharf. Under the terms of the ordinance it will be built at the city's expense, but will be operated for 300 days by the contractors, who will have to agree to incinerate 150 tons of garbage a day, with the understanding that the cost shall not exceed 40 cents a ton.

STREETS AND ROADS.

The names of parties awarded contracts are printed in capital letters.

NEW HAVEN, CONN.—In order to complete the orders passed by Board of Aldermen for paving several streets the Paving Commission will ask the Board of Finance for about $200,000. C. W. Kelly is Cy. Engr.

PATCHOGUE, N. Y.—Citizens have voted on bonding for $16,000 to be used for curbing and paving of roadway on Ocean Ave., from Baker St. to Great South Bay. Village Trustees are urging many added improvements for the place, and a movement is under way to make Patchogue an all-season resort, the same as that contemplated at Long Beach for the development of a new Atlantic City.

CAMDEN, N. J.—It is stated that the City Council has rejected all bids for the paving of several streets with asphalt. L. E. Farnham is Cy. Engr.

BAYONNE, N. J.—Bids are asked by Council, W. E. Hamilton, Cy. Clk., until 8 p. m., Nov. 21, for construction of about 27,700 sq. yds. asphalt pavement, together with necessary curbing, etc., D. W. Dalrymple, Cy. Surv. (Advertised, Engineering News.)

FORT HANCOCK, N. J.—The bid of M. W. PHARO, $2,040.60, has been accepted for the construction of roads and walks around new buildings at Fort Hancock.

ALBANY, N. Y.—The Board of Supervisors of Albany County has appropriated one-half of the estimated cost for the completion of state road from the Wolf Road to Schenectady County line. Contract for the construction will be let as soon as the appropriation of one-half by the State is available.

SCHENECTADY, N. Y.—An ordinance has been presented in the Common Council providing for the widening of Van Vranken Ave.

ATLANTIC CITY, N. J.—The following bids were received Nov. 13 by City Clerk for paving Atlantic Ave.: Cleveland Trinidad Asphalt Co., $259,310; Barber Asphalt Paving Co., $259,347; Walter Quinlan Co., $259,400. Council held back the award for a week so that J. W. Hackney, Cy. Engr., can tabulate the bids.

STEELTON, PA.—The Borough Council has let contract to the UNITED STATES WOOD PRESERVING CO., of Perth Amboy, N. J., for paving Front St., the total contract price amounting to $103,815. Mason D. Pratt is in charge.

GREENSBURG, PA.—We are informed that all bids received Nov. 6 by Town Council for grading, curbing and paving with vitrified brick on a portion of Tremont Ave. have been tabled. Ed. A. Cramer, Boro. Clk.

ALTOONA, PA.—The contract for street paving in the city has been awarded by Board Public Works to the GUISE BRICK & STONE CO., of Williamsport, for $18,005.

BALTIMORE, MD.—Board of Awards has let a contract for paving Richmond Market to J. L. ROBERTSON, 6 East Lexington St., for $3,000.

Contract for paving yard of School No. 74 was let to the MARYLAND PAVING CO., 6 East Lexington St., for $2,900.

NORFOLK, VA.—The Finance Committee has decided in favor of improving Queen St. roadway. Cost, $5,000. W. T. Brooke is Cy. Engr.

HUNTINGTON, W. VA.—Bids were opened Nov. 4 by Street Committee, Jno. H. Sanborn, Cy. Engr., for paving 8th St. with vitrified brick, the contract being awarded to KYLE, ULLOM & KYLE, of Huntington, W. Va., for $21,920.

SAVANNAH, GA.—Contract for constructing driveways in stables at Fort Oglethorpe, Ga., has been awarded to H. C. PITTMAN, of 210 Grant St., Atlanta, Ga., at $2.30.

OWENSBORO, KY.—We are advised that the election held here Nov. 7 to decide the question of issuing $250,000 in bonds for constructing roads was defeated. J. T. Griffith, County Clk.

MONTGOMERY, ALA.—Bids are asked by R. S. Williams, Cy. Treas., until Nov. 20 for paving and improving various streets and sidewalks. D. W. Ford, Cy. Engr.

CINCINNATI, O.—Bids are asked by County Commissioners until Dec. 8 for improving 1,600 ft. of Grove Ave., Springfield Township. C. C. Richardson, County Audr.

CINCINNATI, O.—Bids are asked by Board Public Service until Dec. 1 for constructing a concrete retaining wall on Russell St. and improving said street. Geo. F. Holmes, Clk.

CLEVELAND, O.—The contract for paving of Superior St. with brick has been let by the Board Public Service to the CLEVELAND TRINIDAD ASPHALT CO., for $12,000.

SANDUSKY, O.—Campbell St. will be macadamized in the immediate future. J. W. Miller is Cy. Engr.

KNOX, IND.—The elections on the gravel roads question occurred in Oregon and Railroad Townships, and in each instance the proposition carried by large majorities. Address County Clerk.

CORYDON, IND.—Frank E. Watson, County Audr., informs us that the contract for constructing roads in Spencer Township has been let to STOEBLER & FISHER, of Corydon, for $11,397.

EVANSVILLE, IND.—The Board Public Works has passed a resolution to improve Locust, Water and Walnut Sts. and Riverside Ave., by grading, curbing and paving with brick. Bids will soon be asked for. August Pfaefflin is Cy. Engr.

CROWNPOINT, IND.—It is stated that the County Commissioners have let contract to W. W. HATCH & SONS, of Goshen, for building 11 miles of gravel roads in Hobart Township, for $57,000.

GRAND RAPIDS, MICH.—L. W. Anderson, Cy. Engr., has estimated the cost of paving South Division St. at from $32,000 to $34,000.

The Council has ordered the paving of Scribner St. with brick, from Bridge to Seventh St.

LANSING, MICH.—MURRAY & CO., of Saginaw, have been given the contract to build macadamized road to college. Cost, $12,000. H. A. Collar is Cy. Engr.

LANSING, MICH.—Paving contracts let in the city this year amounted to $66,762, and City Engineer Collar announces that the work to be done next year will exceed this. The work on Franklin Ave. west will be taken up, and on Michigan Ave. east. Ottawa and Washtenaw Sts. will also be completed.

EAST ST. LOUIS, ILL.—Bids were opened by this city on Nov. 9, for paving on St. Clair Ave., the contract being awarded to McCABE & CO., East St. Louis, Ill. The company submitted following bid: Paving with Wabash brick, $8,045; with Banner brick, $7,945; with Hydraulic brick, $8,112.

GENESEO, ILL.—Proposals will be advertised for about April 10 for 100,000 sq. ft. of cement sidewalk. C. O. Harper is Cy. Clk.

MOLINE, ILL.—This city contemplates expending about $40,000 for asphalt street paving next year. Bids will be received about March 1. Clark G. Anderson is Cy. Engr.

LA SALLE, ILL.—This city contemplates paving about ten blocks with asphalt filler and brick paving. W. A. Pauneck, Mayor; Ed. Byrne, Cy. Engr.

OTTAWA, ILL.—Plans will be prepared by Chas. F. Wilson, Cy. Engr., for asphalt paving on three or four streets on the East Side. Jas. F. Farrell, Cy. Clk.

MINNEAPOLIS, MINN.—Andrew Rinker, Cy. Engr., writes us that no definite steps have been taken as yet toward the paving of 100,000 sq. yds. of asphalt streets in business section, and probably will not until after Jan. 1.

ST. PAUL, MINN.—The Board Public Works has awarded to P. H. THORNTON, of St. Paul, the contract for macadamizing Maria Ave., at $5,843.

KENOSHA, WIS.—Property owners on West Main St. have signed a petition for paving that thoroughfare.

LEAVENWORTH, KAN.—This city will take bids in about one month for 17 blocks of regrading and brick paving; also for curbing three blocks on Ottawa St. and for regrading, brick paving and curbing three blocks on Miami St. Bids will also be taken soon for paving Fourth St. with brick, from Elm St. to the city limits, a distance of about 12 blocks. M. A. Przybylowicz is Cy. Clk.; A. Maduska, Cy. Engr.

COFFEYVILLE KAN. — McGUIRE & STANTON, of Leavenworth, were awarded the contract, at $33,950, for grading, paving with brick and curbing a portion of Walnut St., Coffeyville. Rosa Bell is Cy. Clk.

KIRKSVILLE, MO.—Bids were opened Nov. 6 by City Council, Stephen Hall, Cy. Engr., for paving four streets with repressed vitrified paving brick, the contract being let to C. E. HALL, Clinton, Mo., for $17,813.

LITTLE ROCK, ARK.—Contract was not let for concrete curb and gutter in Tenth St., between Park and Battery St. E. A. Kingsley, Engr.

PINE BLUFF, ARK.—J. P. Harper, Cy. Engr., is preparing plans and specifications for paving 19 blocks on West Fourth Ave.

ST. JOSEPH, MO.—This city will probably do considerable amount of paving, mostly brick, next year. W. H. Floyd, Jr., is Cy. Engr.

ST. LOUIS, MO.—We are informed that plans for about 20 miles of streets have been prepared and that work will be let in the spring. F. D. Hudgins, Supt. Sts.

SPOKANE, WASH.—The contract for paving Second Ave. and Bernard St. has been let to the BARBER ASPHALT PAVING CO., at an aggregate bid of $32,388.

SEATTLE, WASH.—Plans for a 120-ft. boulevard extending around the western shores of Lake Union from the northern terminus of Westlake Ave. to junction of main thoroughfare in Fremont, have been completed by City Engineer Thomson and will be brought up before the Council in the shape of an ordinance within a short time.

PORTLAND, ORE.—City Council has provided for the paving of Sellwood St.; est. cost, $4,050. Chas. Wanzer is Cy. Engr.

SAN BERNARDINO, CAL.—See under Bridges.

PHOENIX, ARIZ.—The Board of Supervisors rejected bids for grading of Roosevelt Road. There was only one bid, $5,500, L. R. Lewis.

BOISE, IDAHO.—Contract has been awarded to CHAS. STANLEY, of Emmett, for construction of seven miles of the Emmett-Sweet wagon road for $3,700. Work will commence at once.

MANUFACTURING PLANTS.

The names of parties awarded contracts are printed in capital letters.

SHAWMUT, ME.—Fire gutted the mills of the Shawmut Mfg. Co.

LAWRENCE, MASS.—Michael A. Scanlon and E. Woodbury, real estate agents, have purchased the standing timber on plot of land, situated between Andover, South Broadway, Beacon and Mt. Vernon Sts. They intend to install a steam saw mill and manufacture the standing timber into lumber.

WALLASTON, MASS.—C. A. DODGE & CO., No. 8 Beacon St., Boston, have been awarded the contract for constructing additions to works of the Tubular Rivet & Stud Co., at Wollaston. Cost, $40,000.

BROOKLYN, N. Y.—L. H. Voss, Arch., 65 DeKalb Ave., Brooklyn, has plans for factory building on Waverly near Atlantic Ave., for the Reid Ice Cream Co., 32 New Chambers St., Borough of Manhattan. Brick, stone and concrete, 3 stories, 100 x 75 ft. Cost, $45,000.

The Brooklyn Heights R. R. Co., 168 Montague St., Brooklyn, will erect from its own plans a brick and stone shop and boiler house, 76 x 99 ft., at Fifth Ave and 37th St. Cost, $30,000.

NEW YORK, N. Y.—M. J. Garvin, Arch., 3307 Third Ave., has plans for factory building on Park Ave., near Wendover Ave., for Dressel Railway Lamp Works, 3866 Park Ave. Brick and concrete, 5 stories, 60 x 125 ft., extension, 1 story, 15 x 32 ft. Cost, $50,000.

BINGHAMTON, N. Y.—W. G. Phelps and Geo. C. Bayless have purchased 300 miles of timber land in Canada and will install mills for the purpose of converting the growth into lumber. Address Mr. Bayless.

MALONE, N. Y.—The New York Central & Hudson River R. R. Co. will expend $170,000 for the erection of new railroad shops at Malone. C. J. Parker is Prin. Asst. Engr., New York City.

NEW YORK, N. Y.—Theodore E. Hergert, 384 Second Ave., will erect on a plot 125 x 140 ft., at 423 East 53d St., a six-story fireproof factory building. No plans or architect have yet been selected.

NEW YORK, N. Y.—M. J. Garvin, Arch., 617 East 151st St., is taking figures on a factory to be erected at Park and Wendover Ave., for Dressel Railway Lamp Works, 150 Nassau St. Brick, 5 stories, 60 x 125 ft.

F. H. Quinby, Arch., 99 Nassau St., has plans in progress for factory to be erected at 423-31 East 53d St., for T. E. Hergert, 384 Second Ave. Fireproof, 6 stories, 125 x 140 ft. Generators, boilers, heating system, etc., will be included in the general contract.

NEWARK, N. J.—Pigott & Mathesius, Archs., Union Bldg., Newark, are taking figures on a leather factory to be erected at Oliver St., Newark. Brick, 2 and 3 stories, 40 x 60 ft.

W. Ogden, care J. M. Quinby & Co., 27 Division St., Newark, is [illegible] considering an architect to prepare plans [illegible] an addition to carriage factory, 100 x [illegible] ft. 100 H. P. boiler and 75 H. P. eng[illegible] will be required.

Nathan Nugers, Arch[illegible] St., Newark, has plans [illegible] Washington tory at 35 East Kinney [illegible] gress for ta[illegible] lander, 135 East Kinny [illegible] A. & H. Hol[illegible] Newark.

WARREN, PA.—The W[illegible] Brewing Co. will take bids for new plant. There will be one main building and several smaller structures for store houses, etc. Cost, $200,000. Address President.

MT. VERNON, PA.—E. F[illegible] tolette, West End Trust Bldg., Philadelp[illegible] has plans for two-story hosiery mill at [illegible] Union, for H. A. Romberger.

WARREN, PA.—W. D. T[illegible] of Warren, has announced that the Cudl[illegible] pe & Oil Refining Co. has been organized with a capital of $6,000,000. A refinery [illegible] be built on river south of St. Louis. R[illegible] of way for 365 miles of 6-in. pipe line h[illegible] been secured.

BALTIMORE, MD.—The [illegible] more Buggy Top Co., 1001 Argyle Ave., [illegible] tract to JOHN T. WEST, 11 [illegible] warded contract to [illegible] Lexington St., for the construction of [illegible] tory building at Pennsylvania Ave. and Geo[illegible] St. Brick, 3 stories, 46 x 63 ft. Cost, $[illegible]

The Canton Co., 15 South St[illegible] taking revised bids from the original bidders on the construction of furniture f[illegible] for the Headington-Pfeil Co., at Ca[illegible] Mottu & White, Archs., 328 North Ch[illegible] St.

The wood finishing shop of the Baltimore & Ohio R. R. Co. was destroyed by fire. Loss to machinery amounting to $5,000 and to the building $65,000. D. D. Ca[illegible]thers is Ch. Engr., Baltimore.

Geo. B. Clothier, Arch., Builders' Exchange, has plans for new factory of the Enterprise Wire Works, to be built on Montford Ave., extended. Brick and stone, 4 stories, 60 x 150 ft. Cost, $75,000.

The Monumental Brewing Co., Marine Bank Bldg., will erect an addition to its plant at Seventh and Lombard Sts. Brick, 3 stories, 32 x 72 ft. Otto C. Wolf, 1025 Arch St., Philadelphia, Pa., is Arch.

MOUNDSVILLE, W. VA.—Plans for the National Bed Co's plant have been prepared by I. W. Hyden, 509 Western Ave. Brick, 4 stories, 200 x 60 ft.

STATESVILLE, N. C.—The Statesville Oil & Fertilizer Co. will erect a fertilizer factory and ice plant here.

WINSTON-SALEM, N. C.—The P. H. Hanes Knitting Co. will erect an additional five-story building and add new machinery that will increase the capacity of the plant from 100 to 300 dozen garments daily.

Taylor Bros. will erect a four-story brick addition and double the capacity of their tobacco factory.

STATESVILLE, N. C.—The City Roller Mills, destroyed by fire, will be rebuilt.

CHARLESTON, S. C.—A. W. Todd, Arch., 63 Broad St., Charleston, has prepared plans for three-story laundry building, 50 x 100 ft., for Lloyd's Laundry.

ATLANTA, GA.—The Atlanta Ice & Coal Co. is completing arrangements for the erection of an ice and cold storage plant on a portion of site recently purchased at $60,000. It is proposed to build and equip an ice factory for a daily output of 200 tons and the cold storage plant will be equipped with modern machinery, having a capacity of 200,000 cu. ft. and a storage ice capacity of 10,000 tons. Ernest Woodruff, Equitable Bldg., is Pres.

MACON, GA.—Wm. G. Egerton, J. M. Coleman and A. F. Brame are organizing stock company, with an authorized capital stock of $25,000, to erect and operate planing mill.

PALATKA, FLA.—The Maull Mfg. Co., organized to manufacture orange-box hoops, etc., will erect a building.

BIRMINGHAM, ALA.—It is stated that the Republic Iron & Steel Co., contemplates erecting a steel plant at an early date.

A steel plant will probably be erected here by the Sloss-Sheffield Steel & Iron Co.

YAZOO CITY, MISS.—Walter & Doutha care Goyer Grocery Co., want to correspond with manufacturers relative to machinery and equipment complete for bottling works and cost of same.

HUMBOLDT, TENN.—W. J. Rust, of Milan, will erect a steam laundry here. H. Ferrell, of Humboldt, can probably give information.

MEMPHIS, TENN.—OLSON & LEAC[illegible] have the contract for the erection of breweries and plant for the Memphis Brewing & Malting Co. Total cost will be about $165,000. Plans prepared by Kaestner & C[illegible] Chicago, Ill. Shaw & Pfeil, 41 Madison S[illegible] Memphis, Supv. Archs.

NASHVILLE, TENN.—The "Pink Sh[illegible] Daily Bulletin," of Chattanooga, state th[illegible] the Hiram-Blow-Stave Co. will erect a pl[illegible] here at a cost of $50,000 for the manufacture of staves.

KNOXVILLE, TENN.—The W. J. Oli[illegible] Mfg. Co. will erect a fireproof brick a[illegible] steel building and largely increase the c[illegible]pacity of its plant.

NASHVILLE, TENN.—The Nashville Lau[illegible]dry Co., Leo. D. Wege, Gen. Mgr., will er[illegible] a new four-story building at a cost of $4[illegible]000, to be completed May 1. Work on [illegible] foundation has been started.

ATHENS, TENN.—J. A. Petet, R. F. [illegible] No. 1, will erect a saw mill and is in [illegible] market for machinery for same.

KNOXVILLE, TENN.—T. E. Scoddy, R. [illegible] D. No. 4, contemplates installing concr[illegible] block machinery and wants quotations [illegible] same.

MEMPHIS, TENN.—The South Memp[illegible] Brick & Mfg. Co. will be incorporated w[illegible] $150,000 capital stock. Fifteen acres h[illegible] been secured in New South Memphis. B. [illegible] Mallory and Frank H. Reid are officers.

CLEVELAND, O.—The City Ice Deliv[illegible] Co., Williamson Bldg., Cleveland, will er[illegible] a cold storage and ice plant on property [illegible]cently purchased on East Madison Ave.

PADUCAH, KY.—The Paducah Cooperage Co's heading plant and dry-kiln department was destroyed by fire; loss, $150,000.

CINCINNATI, O.—George Horning, Consult. Engr., Johnston Bldg., Cincinnati, has been employed by the Heruncourt Brewing Co. to prepare plans for the reconstruction of their steam and refrigerating plants, and also to modernize the electrical plant.

MOORESVILLE, IND.—The Indiana Brass & Iron Bed Co. has incorporated, with a capital stock of $100,000. The corporation will establish a large manufacturing plant in Mooresville.

BATTLE CREEK, MICH.—The Duplex Printing Press Co. has plans for new brick factory building, 60 × 250 ft. Cost, $50,000.

MUSKEGON, MICH.—MILLER & BLAIR, of Muskegon, have received the contract for erecting four factory buildings for the Brunswick-Balke-Collender Co., in this city. The contract price amounts to $95,000.

GRAND LEDGE, MICH.—A sewer pipe factory, with a capital stock of $60,000, is about to be organized here. Promoters: Frank Taber, J. W. Fitzgerald and Dr. W. E. Wilson.

LANSING, MICH.—The Hall Lumber Co. will build a two-story addition to its factory, 20 × 80 ft.

ALBION, MICH.—The United Screen Co. will remove from Jackson to Albion, occupy temporary quarters until spring, when it will build a factory for itself. Capital, $200,000.

SHEBOYGAN, WIS.—Chas. Hilpertshauser, Arch., is preparing plans for brew house and office building for the Gutsch Brewing Co. Bids will be received about ten days. Cost, $40,000.

INDEPENDENCE, KAN.—The Hunt Engineering Co., of Independence, we are informed, has begun the construction of the 2,500 barrel Portland cement plant at Table Mound, six miles west of Independence. Ten rotary kilns will be installed. One of the features of the plant will be its location on the side of a lime stone and shale hill or mound, permitting the use of gravity to a great extent in the manufacture. One No. 9 and two No. 5 Gates crushers, water tube boilers, Corliss engines, etc., will be installed.

KANSAS CITY, MO.—Hucke & Sexton, Archs., Dwight Bldg., Kansas City, have prepared plans for five-story and basement refrigerating plant, 90 × 172 ft., for the Merchants' Refrigerating Co., 550 Walnut St. Cost, $125,000. F. H. Tate, Engr., St. Louis.

JOPLIN, MO.—N. A. Keller, of Sauk Center, Minn., contemplates locating a wagon factory here.

ST. LOUIS, MO.—Fire destroyed the factory of the Columbia Box Co., causing a loss of $175,000.

INDEPENDENCS, MO.—The Kansas City Portland Cement Co., W. H. Caffery, Gen. Mgr., Heist Bldg., Kansas City, Mo., is having plans prepared by H. G. Barnhurst, Engr., Ithaca, N. Y., for a new plant at Independence. It will have a capacity of 1,200 bbls. per day, and the preliminary layout calls for the following buildings: Clinker mill, 42 × 100 ft.; stone dryer, 40 × 90 ft.; raw mill, 64 × 90 ft.; kiln building, 110 × 138 ft.; cement stock house, 80 × 200 ft.; limestone stock house, 30 × 200 ft.; coal house, 50 × 100 ft.; engine house, 60 × 120 ft.; crushed shale stock, 20 × 100 ft.; stone crush house, 40 × 48 ft.; shale crusher house, 20 × 20 ft.; lean-to, 12 × 200 ft. The buildings will be constructed of steel, and there will also be a 2,000,000-gal. concrete reservoir. The final plans are nearing completion and will soon be ready for estimates. The cost of the whole plant, including machinery, will be about $750,000. When completed, plans will be figured at Kansas City.

CONROE, TEX.—J. O. H. Bennette will establish a lumber plant having a capacity of 20,000 ft. per day. A steam power plant will be installed. It is also stated that Mr. Bennette will expend $5,000 in the establishment of a plant for the manufacture of building brick. Geo. Cooke, Jr., is Engr.

GALVESTON, TEX.—The Hoo Hoo Planing Mill Co. will rebuild its plant, recently burned.

HOUSTON, TEX.—The Dickson Car Wheel Co. will rebuild its car wheel foundry, burned recently.

TULSA, IND. T.—It is stated that the Grand Rapids Furniture Co., of Grand Rapids, Mich., will establish a furniture factory here.

COMER, ORE.—Bids will be received by the Consolidated Mines Co. until 12 m., Nov. 30, at the office of S. D. Foss, Pres., 701 Merchants Loan & Trust Bldg., Chicago, Ill., for the erection of a 50-ton concentrating plant on its property in the Quartzburg mining district, Comer. Plans and specifications may be seen at office of N. C. Bonnevie, 527 17th St., Denver, Colo.

SANTA ROSA, CAL.—Reports state that the National Ice Co., of San Francisco, will erect an ice factory here, to cost $100,000.

CORNWALL, ONT.—Thos. McGill, of Kearney, Ont., will erect a chair factory at Cornwall, to cost $40,000.

CALGARY, ALTA.—The Western Canada Cement Co., of Calgary, will erect a cement plant, to cost $1,000,000.

CONTRACT PRICES.

(Where (*) precedes items under Contract Prices the work was advertised in Engineering News.)

*PAVING.—Altoona.—Bids were opened Oct. 25 by Board Public Works, Harvey Linton, Cy. Engr., for paving Lexington Ave., 11th St., and 11th Alley with vitrified clay block, 3-in. × 4-in. × 9-in.; work is guaranteed for two years; foundation is to be of Portland cement concrete, 6 ins. thick; curb is to be of sandstone or concrete, 6-in. × 24-in. × 4-ft. The contract was awarded on Nov. 1 to GUISE BRICK & STONE CO., INC., Williamsport, Pa., at the following bid: 10,057 sq. yds. paving, $1.85; curb, $0.85; curb reset, $0.20; total, $18,605.

READERS' WANTS Our readers, and others, who are in the market for supplies, machinery, etc., or to award contracts for work, will nearly always find the names of the firms who have the material they want by referring to our advertising pages. Our advertisers are constantly changing their cards, and for this reason we advise our readers to look over the paper from the front cover to the back cover so as to keep in touch with up-to-date contractor's material, methods, etc. **Mention Engineering News** when writing our advertisers. If, however, you do not find advertised just what you want please write us at once and we will notify the proper firms without delay, and **without charge.—Engineering News can help buyers.**

40-IN. BORING MACHINE.—Suffolk, Va.—J. H. Macleary is understood to be in the market.

STEAM TRAPS.—Germany.—Paetow Gebruder, of Durseldorf, Germany, is reported as in the market for steam traps, etc.

JOINT RUNNERS.—Brooklyn, N. Y.—Jos. G. Pollard, 141 Raymond St., writes us that he wishes the names of makers of joint runners.

WINDMILLS.—Spain.—It is stated that Jose de la Quintana, of Jerez de la Frontera, Spain, wants catalogues from firms making windmills.

TRANSITS, LEVELS, ETC.—Youngstown, O.—W. C. Toler, 621 William St., writes us that he wants the names of firms who sell transits, levels, etc.

BOILER AND ENGINE, RICE MACHINERY, ETC.—Mexico.—H. D. Barto, of Minatitlan, Vera Cruz, Mex., is reported as in the market for the above.

HARDWARE, IRON AND STEEL DOORS, PRISMATIC LIGHTS, ETC.—Cuba.—Castelleiro & Vigoso, Apartado 300, Havana, are reported as in the market.

WATER PAINTS, VALVES, FILES, TOOLS, ETC.—Italy.—Risi & Muratorio, via del Molo 15-3, Genoa, Italy, are in the market for the above, according to reports.

WIRE NAILS, IRON BARS, ETC.—Germany.—Perells & Buchler, Dammthor Strasse 30, Hamburg, are reported as wanting quotations for furnishing the above in Germany.

ROTARY ENGINES.—Philadelphia, Pa.—H. P. Daile, Asst. Ch. Engr. Spreckel's Sugar Refining Co., foot of Reed St., writes us that he wants the names of makers of rotary engines.

BLUE FLAGSTONE.—New York, N. Y.—Jas. C. Park, Engr. and Contractor, 120 Broadway, writes us that he wants the names of blue flagstone quarries in New York and Pennsylvania.

RAILROAD EQUIPMENT.—British India.—N. Parry Jones, Asst. Engr. B. B. & C. I. Ry., Bulsar, Bombay, India, writes us that he wants catalogues from manufacturers of railway equipment.

GARBAGE DISPOSAL PLANT.—Holland.—Jan Hames & Co., Fredericksplein 6 and 8, Amsterdam, are in the market for garbage disposal plant, and wish to receive circulars, etc., at once.

CORLISS ENGINE.—Davenport, Iowa.—The Davenport Locomotive Works, W. H. Koons, P. A., writes us that it will soon be in the market for a Corliss engine of 250 to 300-HP capacity.

STEAM ENGINES, ELECTRICAL SUPPLIES, MACHINE TOOLS, PUMPS, ETC.—Philippines.—Germann & Co., Ltd., P. O. Box 310, Manila, P. I., are understood to be in the market for the above.

HARDWARE, INDUSTRIAL MACHINES, TOOLS, BICYCLES, ETC.—Austria.—Robt. Hiess, VIII Ledgerergasse 26, Vienna, Austria, is reported as wishing to act as agent for firms making the above.

ELECTRIC AND LIQUID AIR AUTOMOBILES.—England.—R. A. Frank, High Hall, Kirby Moorside, Yorkshire, Eng., writes us that he wants the names of makers of electric automobiles and liquid air machines in the U. S.

ELECTRIC ELEVATOR.—Ogden, Utah.—L. B. Spencer, Consult. Engr., Ogden, writes us that one of his clients is in the market for an electric elevator, and wishes the addresses of concerns making the same.

TOOLS AND CONTRACTORS' MACHINERY.—New York, N. Y.—The Concrete Steel & Tile Construction Co., 1 Madison Ave., writes us that it wants catalogues from firms making tools and machinery for engineers and contractors.

CONCRETE MIXERS AND CEMENT BLOCK MACHINES.—Brooklyn, N. Y.—Randel & Small Cement Construction Co., 242 Rutledge St., Brooklyn, writes us that it is in the market for the above, and wishes to receive catalogues from manufacturers.

GALVANIZED, CAST AND WROUGHT IRON PIPE, IRON DRILLS, IRON BARS, BAR STEEL, ETC.—Brazil.—J. Nicola Irmaos, of Nicola Bros., Mococa, Brazil, is reported as in the market for the above, as well as for certain lines of agricultural implements.

CAST-IRON WATER PIPE AND TERRA COTTA SEWER PIPE.—Raleigh, N. C.—The Glenwood Land Co., A. L. Munald, Mgr., writes us that it will be in the market for 1,500 ft. of 6-in. standard c.-i. water pipe and also several carloads of 8-in. terra cotta sewer pipe.

BUILDING MATERIALS, CONTRACTORS' MACHINERY, STEAM ENGINES, MACHINE TOOLS, ELECTRIC LIGHTING APPLIANCES, ETC.—France.—M. Griffon, rue Jeanne d'Arc 196, Nancy, France, a Civil Engineer, is understood to be in the market for the above.

WATER-WORKS SUPPLIES.—Osceola, Ark.—W. E. Ayres, Eng., Odd Fellows' Bldg., Memphis, Tenn., informs us that the city is about to construct a system of waterworks to cost $30,000, for which bonds will be issued, and catalogues are desired from manufacturers for the necessary supplies.

IRON TELEPHONE POLES.—Lynchburg, Va.—H. L. Shaner, Cy. Engr., writes us that he wants data relating to iron poles for supporting telephone wires, as this city is contemplating requiring the telephone companies to use iron poles instead of wooden ones.

100-HP. BOILER.—Lenoir, N. C.—The Moore Furniture Co. is reported in the market.

MACHINERY FOR MAKING HEMP CLOTH.—Costa Rica, Central Am.—R. Garcia Burban, of San Isidro de Heredia, Costa Rica, C. A., writes us that he wishes data relating to machinery for making hemp cloth, as he intends to build such a plant. It is desired to have persons interested in such plants furnish estimates of the cost and also a list of the machinery, etc., required.

WIRE-WORKING MACHINES.—Consul White, of Hanover, reports that Dr. Robert Grimshaw, of Fund Strasse No. 30, Hanover, Germany, desires information and quotations for wire-working machines and appliances, including machinery for using and utilizing the wire, such as drawbenches, wire pointing and wire bending machinery, wire annealing furnaces, wire galvanizing appliances, wire looms, wire-fence machinery, wire-nail and wire-staple machines. The quotations should be f. o. b. Hamburg or Bremen, and samples and quotations should be sent to Doctor Grimshaw's address as given above.

*IRRIGATION CANAL.—Denver, Colo.—Bids were opened Nov. 8 by U. S. Reclamation Service, Denver office, C. E. Wells, Supervising Engr.; C. H. Fitch, Supervising Engr.; J. H. Quinton, Supervising Engr.; Jno. E. Field, District Engr., for constructing main canal, Interstate Canal, North Platte Project, Nebraska. The two lowest bidders on each division will be found under Water Supply-Irrigation in this issue. The itemized bid of Deadwood Construction Co., this concern being lowest bidder on the first five divisions and the eighth division, was as follows:

Items.	Quantities.		Amount
Division 1.			
Excavation:			
Class 1	370,000	cu. yds.	.1398
" 2	1,000	"	.55
" 3	100	"	.45
" 4	100	"	.50
Overhaul	60,000	"	.015
Total			$53,271
Division 2.			
Excavation:			
Class 1	400,000	cu. yds.	.13
" 2	1,000	"	.50
" 3	100	"	.45
" 4	100	"	.50
Overhaul	120,000	"	.015
Total			$54,395
Division 3.			
Excavation:			
Class 1	380,000	cu. yds.	.145
" 2	24,000	"	.55
" 3	100	"	.45
" 4	100	"	.50
Overhaul	80,000	"	.015
Total			$69,595
Division 4.			
Excavation:			
Class 1	330,000	cu. yds.	.13
" 2	1,000	"	.55
" 3	100	"	.45
" 4	100	"	.50
Overhaul	140,000	"	.015
Total			$45,645
Division 5.			
Excavation:			
Class 1	300,000	cu. yds.	.13
" 2	1,000	"	.55
" 3	100	"	.45
" 4	100	"	.50
Overhaul	160,000	"	.015
Total			$42,045
Division 6.			
Excavation:			
Class 1	340,000	cu. yds.	.15
" 2	60,000	"	.55
" 3	100	"	.45
" 4	100	"	1.00
Overhaul	100,000	"	.015
Total			$85,645
Division 7.			
Excavation:			
Class 1	380,000	cu. yds.	.16
" 2	30,000	"	.60
" 3	100	"	.45
" 4	100	"	1.00
Overhaul	120,000	"	.015
Total			$80,745
Division 8.			
Excavation:			
Class 1	240,000	cu. yds.	.135
" 2	20,000	"	.55
" 3	100	"	.45
" 4	100	"	.55
Overhaul	60,000	"	.015
Total			$44,400
Grand total			$475,741

*CONCRETE CONDUIT.—Toledo, O.—Bids were opened Nov. 6 by Board Public Service, Harry Jones, Secy., for constructing Secs. 1 and 2 of filtered water conduit, Contracts Nos. 2 and 3, Improvement of Water Supply. The conduit will be 6 ft. internal diameter, built of concrete. Bids on this work had previously been opened Sept. 7, and were given under Contract Prices in our issue of Sept. 21. The work, however, was subsequently readvertised. At the letting Nov. 6 bids were taken on the two contracts separately, the bidders on Contract No. 2, Sec. 1, being as follows; (1) Henry P. Burgard, Buffalo, N. Y.; (2) Thomas McKinney & Sons, Toledo, O.; (3) W. J. Gawne, Cleveland, O.; (4) H. P. Streicher, Toledo, O.; (5) A. Bentley & Sons, 419 Madison St., Toledo, O.; (6) Breyman & O'Neil, Toledo, O.; the same parties bid on Contract No. 3, Sec. No. 2; the bids received for the work were as follows, the totals representing whether the work is to be done by the open cut method, tile lining; the tunnel method, tile lining; the open cut method, mortar face lining, and the tunnel method, mortar face lining, respectively:

FILTERED WATER CONDUIT-IMPROVEMENT OF WATER SUPPLY, TOLEDO, OHIO.—BIDS OPENED NOV. 6, 1905.

CONTRACT NO. 2. SEC. NO. 1.

		(1)	(2)	(3)	(4)	(5)	(6)
Open cut tile lining	4,100 ft.	.....	$23.00	.....	$23.50	.....	$28.00
Tunnel tile lining	4,100 ft.	$16.00	16.50	$14.25	15.70	$11.90	14.80
Open cut mortar face lining	4,100 ft.	.....	21.00	.....	21.50	.....	26.00
Tunnel mortar face lining	4,100 ft.	16.00	14.50	13.50	13.75	11.90	12.87
Reinforcing steel rods	50 tons.	75.00	130.00	75.00	100.00	140.00	50.00
Additional concrete	200 cu. yds.	9.00	8.00	6.00	9.00	6.80	5.00
Plank flooring	2,000 ft. B.M.	45.00	60.00	35.00	40.00	28.00	21.00
Manholes, complete	4	350.00	200.00	285.00	150.00	350.00	150.00
Blow-offs	75 ft.	7.00	12.00	3.35	6.00	1.80	250.00
Total bids: Open cut tile lining		.....	$105,300	.....	$10,500	.....	$119,507
Tunnel tile lining		$73,975	78,650	$65,466	73,020	$59,245	65,387
Open cut mortar face		.....	97,100	.....	96,800	.....	111,307
Tunnel mortar face		73,975	70 450	62,391	65,025	61,705	57,474

CONTRACT NO. 3. SEC. 2.

		(1)	(2)	(3)	(4)	(5)	(6)
Open cut tile lining	2,900 ft.	.....	$23.00	.....	$23.50	.....	$28.00
Tunnel tile lining	2,900 ft.	$16.00	16.50	$14.25	15.70	$11.90	14.80
Open cut mortar face lining	2,900 ft.	.....	21.00	.....	21.50	.....	26.00
Tunnel mortar face lining	2,900 ft.	16.00	14.50	13.50	13.75	11.90	12.87
Reinforcing steel rods	30 tons.	75.00	130.00	75.00	100.00	120.00	50.00
Additional Concrete	140 cu. yds.	9.00	8.00	6.00	9.00	6.80	5.00
Plank flooring	1,500 ft. B.M.	45.00	60.00	35.00	40.00	28.00	21.00
Manholes, complete	3	350.00	200.00	285.00	150.00	350.00	150.00
Blow-offs	75 ft.	7.00	12.00	3.35	6.00	1.80	2.50
Total bids: Open cut tile lining		.....	$74,120	.....	$73,910	.....	$84,352
Tunnel tile lining		$52,160	55,270	$46,046	51,290	$40,667	46,072
Open cut mortar face		.....	68,320	.....	68,010	.....	78,552
Tunnel mortar face		52,160	49,470	43,871	45,635	42,407	40,475

***GRADE CROSSING ABOLISHMENT.**—Brooklyn, N. Y.—Following bids were opened Nov. 2 by John H. Dwyer, Engr.-in-Charge, Brighton Beach Improvement, for work scheduled under Proposal No. 1—Church Ave. to Ave. "O"—Brighton Beach Division, Brooklyn Union Elevated R. R.; (1) Charles Cranford, 38 Court St., Brooklyn; (2) Uvalde Asphalt Paving Co., 1 Broadway, New York; (3) James A. Hart Co., 256 Broadway, New York; (4) Beinhauer & See, 289 Fourth Ave., New York; (5) James H. Holmes; (6) W. H. Gahagan, 231 Lincoln Pl., New York; (7) J. F. Shields, 215 West 125th St., New York; (8) J. G. White & Co., 49 Exchange Pl., New York; (9) Degnon Contracting Co., 21 Park Row, New York; (10) Monolith Reinforced Concrete Co.; (11) [illegible] & Waldo, 21 Park Row, New York. Borough Construction Co., 44 Court St., Brooklyn. The contract was awarded to [illegible]LES CRANFORD.

BIDS OPENED NOV. 2, 1905, AT BROOKLYN, N. Y., FOR GRADE CROSSING ABOLISHMENT.

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Earth excavation	230,000 cu. yds.	$ .73½	$ .60	$ .82	$ .87	$ .87½	$ .94	$1.00	$1.35	$1.31	$1.19	[illegible]	$1.40
Concrete: Class A*	43,500 "	5.20	6.25	5.80	5.90	6.45	7.15	8.00	7.83	7.00	7.89	[illegible]	3.60
" Class B	43,500 "	4.70	5.98	5.60	5.73	6.13	6.20	7.50	7.28	6.80	7.66	[illegible]	8.00
Reinforced concrete at stations	1,900 "	15.15	13.00	7.75	10.54	11.19	9.60	8.25	11.20	16.35	20.00	[illegible]	13.65
Waterproofing " "	22,000 sq. ft.	.60	.50	.21	.10	.33	.60	.20	.25	.40	.07	[illegible]	.14
Steel columns " "	26,000 lbs.	.05½	.04	.12	.09½	.07	.06½	.06	.09	.04½	.06	[illegible]	.10
Cement platforms " "	13,500 sq. ft.	.16	.35	.18	.25	.13	.18	.25	.22	.20	.22	[illegible]	.33
Vitrified clay conduits	150,000 duct ft.	.08	.09	.13	.09½	.13	.14½	.10	.10	.10	.07	[illegible]	.11
Steel I-beams, etc., in manholes	38 M. H.	36.40	40.00	50.00	27.00	11.00	65.00	50.00	20.00	50.00	45.00	[illegible]	26.10
6-in. pipe, sewer	1,800 lin. ft.	.17	.25	.20	.14	.39	.75	.16	.17	.20	.18	[illegible]	.21
12-in. pipe, "	1,800 "	.46	.90	.55	.44	.69	2.35	.45	.49	.60	.60	[illegible]	.63
18-in. pipe, "	700 "	.80	1.25	1.00	.77	1.11	2.90	.78	.86	1.25	1.00	[illegible]	1.19
24-in. pipe, "	3,700 "	1.40	1.50	1.75	1.42	1.59	3.90	1.70	1.60	2.00	2.30	[illegible]	1.80
Granite block pavement: New†	4,000 sq. yds.	2.45	2.10	2.40	2.50	2.31	3.00	3.00	3.25	3.00	6.00	[illegible]	2.86
Second-hand	4,000 "	1.50	1.75	1.80	2.85	2.21	2.00	2.25	.....	2.25	4.75	[illegible]	2.86
C. I. for drain covers, etc.	50,000 lbs.	.03½	.04	.05	.04½	.05	.03½	.03½	.03	.03	.06	[illegible]	.05
Reconstruction of Foster Ave. sewer	lump sum.	19,150	17,000	23,500	30,000	17,000	20,500	30,000	26,800	35,000	30,000	32,[illegible]	32,455
Reinforced concrete on highway bridges	450 cu. yds.	10.00	13.00	10.00	22.60	9.75	11.00	8.25	13.00	15.00	20.00	[illegible]	13.65
Cinder " " "	600 "	3.80	5.00	4.25	5.00	4.50	6.00	5.75	4.75	7.30	6.00	[illegible]	6.82
Wood block pavement on " "	1,800 sq. yds.	2.00	2.75	3.00	2.75	2.75	2.75	3.03	3.10	4.00	1.50	[illegible]	4.78
Cement sidewalks on " "	9,300 sq. ft.	.08	.18	.30	.20	.13	.27	.18	.40	1.20	.22	[illegible]	.36
Concrete curbs on " "	760 lin. ft.	1.45	1.25	1.50	.75	.81	.75	.75	.75	.85	1.00	[illegible]	1.02
Brick masonry	50 cu. yds.	15.00	15.00	25.00	18.00	13.00	11.00	15.00	12.50	14.00	25.00	10.00	20.47
Granite block pavement, sand foundation	sq. yd.	2.30	2.10	2.40	2.65	2.03	2.75	3.00	3.50	2.75	6.00	[illegible]	4.09
" " " concrete foundation	"	3.15	2.50	3.00	4.00	3.00	3.25	3.75	4.30	4.00	7.00	[illegible]	4.78
Macadam pavement	"	1.00	.90	1.25	1.00	.65	.80	1.60	1.75	1.50	1.35	[illegible]	1.02
Asphalt "	"	1.60	1.50	2.40	2.55	3.00	2.60	2.50	2.35	3.00	2.50	1.40	4.78
Concrete foundation, any pavement	"	.90	.70	1.00	1.65	5.25	1.00	.80	.75	6.00	4.50	[illegible]	2.05
Cement curbs	200 lin. ft.	.60	.60	1.00	.50	.51	.60	.30	1.25	1.00	1.00	[illegible]	1.02
Cement sidewalks	4,950 sq. ft.	.14	.18	.20	.20	.19	.16	.25	.20	.20	.30	[illegible]	.27
Blue stone flagging, new	"	.29	.30	.30	.15	.21	.29	.30	.30	.25	.20	[illegible]	.27
Resetting stone flagging	1,200 sq. ft.	.03	.05	.10	.05	.05	.06	.08	.10	.05	.15	[illegible]	.14
" " " curbing	100 lin. ft.	.09	.25	.35	.20	.13	.16	.10	.25	.30	1.00	[illegible]	.21
Repaving old granite or Belgian block	sq. yd.	.35	.50	.50	.45	.75	.40	.75	1.00	1.00	3.00	[illegible]	.55
Y. P. planking and stringers	10,000 ft. B.M.	38.00	50.00	55.00	55.00	41.00	42.00	38.00	54.00	40.00	60.00	50.00	47.75
Force account extra work	Per cent.	10%	15%	10%	15%	15%	10%	10%	15%	15%	15%	20%	20%
Date of completion		May 1,'07	Mar. 1,'07	Dec. 1,'07	Dec. 1,'07	Nov. 1,'07	June 1,'07	Nov. 1,'07	Aug. 1,'07	Nov. 15,'07	Dec. 25,'07	Jan. 1,'08	Sep. 30,'07
Totals		$505,996	$521,025	$550,845	$572,354	$587,069	$661,846	$688,988	$742,285	$756,949	$762,730	$785,993	$870,591
SUPPLEMENTARY BIDS.													
Scheme No. 1.—Earth excavation	230,000 cu. yds.	.67½	.55	.74	.98	.83	.86	.60	.96	1.26	.95	1.37	1.40
Concrete: Class A*	10,000 "	5.20	6.25	5.80	5.90	6.25	7.00	7.75	7.83	6.80	7.69	7.25	9.50
Class B	10,000 "	4.70	5.95	5.60	5.73	6.09	6.00	7.25	7.28	6.60	7.46	6.75	8.00
Date of completion		Apr. 1,'07	Mar. 1,'07	Sept. 1,'07	June 1,'07	Sept. 1,'07	May 1,'07	July 1,'07	Aug. 1,'07	Sep. 15,'07	Oct. 1,'07	Nov. 1,'07	Sep. 30,'07
Scheme No. 2.—Earth excavation	230,000 cu. yds.	.69	.56	.79	.87	.85	.90	.75	1.23	1.30	1.00	1.45	1.40
Date of completion		May 1,'07	Mar. 1,'07	Dec. 1,'07	Dec. 1,'07	Oct. 1,'07	June 1,'07	Sept. 1,'07	Aug. 1,'07	Nov. 15,'07	Nov. 1,'07	Dec. 1,'07	Sep. 30,'07

* Estimate is calculated on using Class A concrete. † Estimate is calculated on using new granite blocks.

WATER MAINS.—New York, N. Y.—Bids were opened Nov. 8 by John T. Oakley, Comr. Water Supply, Gas and Electricity, for furnishing, delivering and laying water mains in Columbus and Ninth Aves., 62d St., Central Park West and Central Park, the bids received being as follows; (1) Clinton Beckwith, 49 West 27th St., New York; (2) F. V. Smith Contracting Co., 147 East 125th St., New York; (3) Norton & Dalton Contracting Co., 27 West 140th St., New York; (4) Jno. Cornwell, 69 East 127th St., New York; (5) Gallo & Pettelli, 127 Mulberry St., New York; (6) M. O'Brien; (7) P. Goodman, 1668 Park Ave., New York:

BIDS RECEIVED AT NEW YORK, N. Y., NOVEMBER 8, 1905, BY JOHN T. OAKLEY, COMR. WATER SUPPLY, GAS AND ELECTRICITY, FOR FURNISHING, DELIVERING AND LAYING WATER MAINS, IN COLUMBUS AND NINTH AVENUES, 62D STREET, CENTRAL PARK WEST, AND CENTRAL PARK.

Items.	Quantities.	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Straight pipe	7,800 tons	$30.00	$29.00	$30.00	$31.00	$33.00	$27.50	$32.00
Special castings	500 "	60.00	60.00	65.00	60.00	70.00	61.00	70.00
Rock excavation without blasting	5,500 cu yds.	6.00	3.50	5.00	6.00	5.00	9.00	20.00
Rock excavation	2,500 "	3.00	3.50	5.00	4.00	3.00	3.00	3.00
Masonry excavation	1,000 "	1.50	3.50	1.50	2.00	.01	9.00	4.00
Earth excavation	64,000 "	.60	.55	.75	1.00	1.00	.60	1.25
Filling and embankment	54,000 "	.30	.10	.50	1.00	.20	.45	1.25
60-in. pipe	1,100 lin. ft.	2.00	2.20	2.50	3.00	4.50	4.00	2.50
44-in. pipe	14,500 "	1.50	1.60	2.00	1.50	4.50	3.00	2.00
36-in. pipe	5,300 "	1.00	1.20	1.25	1.20	2.00	2.00	1.50
30-in. pipe	250 "	1.00	1.10	1.00	.90	2.00	.75	1.50
24-in. pipe	100 "	1.00	1.00	1.00	.80	2.00	.60	1.00
20-in. pipe	700 "	.75	.80	.75	.70	2.00	.60	1.00
12-in. pipe	23,000 "	.50	.50	.50	.60	.80	.25	.50
6-in. pipe	6,500 "	.30	.25	.30	.30	.40	.20	.25
48-in. inside screw gate valve and gearing	1	1,500.00	1,000.00	1,200.00	1,200.00	2,000.00	900.00	1,000.00
48-in. side screw gate valves and gearings	3	1,000.00	1,000.00	1,200.00	1,250.00	2,000.00	1,000.00	1,000.00
36-in. inside screw gate valves and gearings	2	600.00	575.00	550.00	750.00	1,000	550.00	750.00
30-in. " " " "	2	375.00	400.00	425.00	450.00	500.00	375.00	750.00
24-in. inside screw gate valve and gearing	1	300.00	300.00	300.00	400.00	500.00	345.00	500.00
20-in. inside screw gate valves and boxes	3	175.00	150.00	150.00	250.00	400.00	250.00	250.00
12-in. " " " "	175	60.00	60.00	55.00	100.00	85.00	75.00	70.00
12-in. " " " "	7	60.00	60.00	55.00	100.00	100.00	75.00	70.00
6-in. " " " "	181	33.00	40.00	30.00	65.00	40.00	36.00	35.00
Double-nozzle st. New York hydrants	159	40.00	50.00	40.00	75.00	50.00	38.00	40.00
20x20-in. connections	2	350.00	225.00	325.00	350.00	500.00	200.00	300.00
20x12-in. connections	2	250.00	100.00	150.00	200.00	300.00	140.00	200.00
20x6-in. connections	8	125.00	50.00	100.00	150.00	250.00	120.00	150.00
Blow-offs, to set	7	10.00	10.00	25.00	40.00	20.00	15.00	50.00
24-in. vitrified drain pipe	100 lin. ft.	3.00	2.00	2.00	2.40	3.00	1.00	3.00
18-in. " " "	100 "	2.00	1.50	1.00	1.40	3.00	1.00	3.00
12-in. " " "	200 "	1.50	.70	.75	.60	2.00	.90	2.00
6-in. " " "	3,000 "	1.00	.30	.50	.30	1.00	.50	1.00
Brick masonry	750 cu. yds.	15.00	10.00	18.00	12.00	.01	15.00	18.00
Concrete masonry	750 "	8.00	5.00	10.00	6.00	3.00	10.00	8.00
Rubble masonry	300 "	6.00	4.00	4.00	4.00	.01	4.00	5.00
Dry stone masonry and rip-rap	300 "	2.50	1.50	1.50	2.00	.01	2.25	5.00
Park wall	50 lin. ft.	16.00	7.00	5.00	6.00	.01	.01	5.00
Pudding	3,500 cu. yds.	65.00	1.00	1.00	.50	.01	.90	1.50
Sodding and garden mold	2,500 sq. yds.	.40	1.00	.50	2.00	.01	2.10	1.00
Asphalt pavement and asphalt or artificial stone sidewalk	6,200 "	4.00	3.00	2.50	3.50	2.00	4.00	3.00
Granite block pavement on concrete foundation and tar and gravel or cement joints	250 "	2.00	1.50	2.00	1.50	2.00	2.00	3.00
Telford macadam pavement, driveway, bridle and foot paths	1,500 "	1.00	1.75	1.00	1.40	1.00	1.75	1.00
Pavement and flagging	19,000 "	.40	....	.50	.40	.50	.25	.75
Curb and gutter	2,500 lin. ft.	.10	.10	.10	.01	.01	.10	.25
Sheet piling and timber (exclusive of bed blocks and wedges, that may be left in the work by order of engineer)	10,000 ft., B.M.	25.00	40.00	40.00	40.00	10.00	45.00	50.00
Wrought-iron or steel installed complete to place	6,000 lbs.	.03	.04	.10	.10	.05	.02	.05
Totals		$498,443	$450,450	$529,875	$590,225	$582,639	$537,296	$614,410

MISCELLANEOUS CONTRACTS.

CONDUIT WORK.—Benton Harbor, Mich.—Twin City Telephone Co. proposes to spend $33,000 in putting its wires in main part of city underground, and in other improvements.

DREDGING.—New York, N. Y.—Bids are asked until noon Nov. 28 for dredging in Shrewsbury River, N. J. Col. W. R. Livermore, U. S. Engrs. (Advertised, Engineering News.)

BOILER.—Asbury Park, N. J.—Bids are asked by Common Council until noon, Nov. 27, for furnishing and erection of 200-HP. internal furnace, tubular boiler. John L. Coffin, Supt. Dept. Water and Sewer. (Advertised, Engineering News.)

WHARF.—Shippegan, N. B.—Bids are asked by Fred Gelinas, Secy. Dept. Pub. Wks., Ottawa, Ont., until Nov. 24 for construction of a wharf at Shippegan.

HAULING.—Casper, Wyo.—Contract for hauling cement and other material to Alcova dam site of the Government Pathfinder Irrigation Project has been let to RICHARDS & CUNNINGHAM CO., Casper.

DRAINAGE DITCH.—Fort Dodge, Ia.—Bids are asked by H. S. Holm, County Audr., until 1 p. m., Dec. 5, for construction of a joint county drainage ditch, requiring about 92,000 cu. yds. excavation.

DRY DOCK.—Galveston, Tex.—Charles Clark & Co., dredging contractors, who have Government contracts on the Gulf Coast, propose to construct a large dry dock for this port, at a cost of about $150,000.

CONCRETE DAM.—Painesville, O.—The Roberts & Abbott Co., Schofield Bldg., Cleveland, O., are engineers for a reinforced concrete gravity dam across Grand River for the Abbott Co., Painesville, O. Work will be commenced at once.

LUMBER, PIPE, ETC.—Washington, D. C.—Bids are asked by D. W. Ross, General Purchasing Officer, Isthmian Canal Commission, until 10.30 a. m., Nov. 17, for yellow pine flooring and siding, doors and sash, tool steel, cast iron pipe, etc.

DOCKS.—New Westminster, B. C.—Vancouver, Westminster & Yukon Ry. Co., John Hendry, Pres., Vancouver, B. C., is stated to be having plans made for building docks with a frontage of 500 ft. on the Fraser River. Work was to be commenced immediately.

CONCRETE WALL.—Cincinnati, O.—Bids are asked by Board Public Service, George T. Holmes, Clk., until Nov. 27, for constructing reinforced concrete retaining walls on site of new Cincinnati Hospital, Goodman St. and Eden Ave. Hannaford & Sons, Archs., Hulbert Block.

DRAINAGE DITCH.—Onawa, Ia.—Contract for constructing Cleghorn ditch has been awarded to CANAL CONSTRUCTION CO., Chicago, Ill., at 10.9 cts. per cu. yd. Work requires about 125,000 cu. yds. excavation.

RIPRAP JETTY, ETC.—New York, N. Y.—Bids are asked until noon, Dec. 6, for riprap jetty at Mattituck Harbor, riprap breakwater at Sag Harbor, and for dredging in Bronx River and East Chester Creek, N. Y. Col. W. R. Livermore, U. S. Engrs. (Advertised, Engineering News.)

ELEVATOR, TOOLS.—Washington, D. C.—Bids are asked by Bureau Supplies and Accounts, Navy Department, until 10 a. m., Dec. 10, for furnishing a quantity of machine tools, etc., as follows: Schedule 235, elevator; schedule 236, angle shear, key seater, pipe cutting machine.

MACHINERY, ETC.—Washington, D. C.—Bids are asked by D. W. Ross, General Purchasing Officer, Isthmian Canal Commission, until 10.30 a. m., Nov. 24, for furnishing shop machinery, lathes, planers, saws and timber dressing machines, drills, engine, engine indicators, pressure gages, sheet steel, etc.

BOILERS.—Poughkeepsie, N. Y.—Bids are asked by State Commission in Lunacy, T. E. McGarr, Secy., Albany, N. Y., until 3 p. m., Nov. 22, for furnishing and installing three 125-HP. and one 70-HP. horizontal tubular boilers at Hudson River State Hospital, Poughkeepsie. G. L. Heins, State Arch., Albany, N. Y.

RETAINING WALL.—Bradford, Pa.—Following bids were opened Nov. 6 by E. C. Charlton, Cy. Clk., for constructing retaining wall on High St.; (1) total for stone wall, (2) concrete wall: H. T. Jacobson, 15 School St., Bradford, (1) $1,654, (2) $1,745; W. H. Bannon, 106 State St., Bradford, (1) $1,660, (2) $1,785.

SAND, SUPPLIES.—New York, N. Y.—Bids are asked by Maurice Featherson, Comr. Docks, Pier A, Battery Pl., until 2 p. m., Nov. 20, for furnishing and delivering about 6,000 cu. yds. sand; also for furnishing and delivering miscellaneous supplies, the latter contract including machinist supplies, iron, steel, rubber packing, etc.

BOILERS.—New York, N. Y.—Following bids were opened Nov. 14 by Board of Health, Thomas Darlington, Pres., for furnishing and erecting two new boilers at Kingston Ave. Hospital, Brooklyn: Blake & Williams, 211 West 20th St., $11,565; James McArthur, 22 Ormond Pl., Brooklyn, $9,488; E. Rutzler Co., 127 White St., $9,844.

PIPE LINE, TANKS, ETC.—St. Louis, Mo.—Cudahy Pipe & Oil Refining Co., recently organized with $6,000,000 capital, is stated to have secured right-of-way for a 6-in. pipe line, 365 miles long. A 6,000 bbl. refinery will be erected south of St. Louis, and 1[illegible] storage tanks will be constructed. W. D. Tod, Warren, Pa., is vice-Pres.

PIPE SYSTEM—New York, N. Y.—Bids are asked by Board of Health, 55th St. and 6th Ave., until 10 a. m., Nov. 28 for furnishing labor and furnishing and erecting all the materials necessary or required to furnish and install a pipe system in the underground gallery at the Kingston Ave. Hospital, Kingston Ave. and Fennimore St., Borough of Brooklyn.

*SEWERS.—Chattanooga, Tenn.—Following bids were opened Nov. 7 by Board Public Works, Robt. Tooke, Cy. Engr., for construction of sewers; (1) Noll & Thompson, Chattanooga, Tenn; (2) E. T. Lewis & Co., Nashville, Tenn.; (3) GUILD & CO., Chattanooga, Tenn (awarded contract); (4) Robert C. Storrie, New Orleans, Ia.:

Bids received at Chattanooga, Tenn., November 7, 1905, by Board Public Works, for Construction of Sewers.

Items.	Quantity.	(1)	(2)	(3)	(4)
Earth excavation, under 20-ft.	3,664 cu. yds.	$0.47	$0.75	$0.75	$1.30
" " 20 to 40 ft. deep	9,771 "	.78	2.00	.85	1.40
" " 40 to 61 ft. deep	10,261 "	.99	4.00	.95	1.30
Rock excavation, open trench	189 "	3.00	6.00	3.00	4.00
Earth excavation, in tunnel	100 "	1.75	20.60	3.35	10.00
Rock " " "	28 "	3.50	28.00	5.00	10.00
30-in.x75-in. sewer, 2-rings	1,268 ft.	6.32	5.00	5.70	6.50
" " " 3-rings	461 "	10.05	7.00	8.25	10.00
" " " 3-rings in tunnel	80 "	16.76⅓	12.00	14.00	15.00
48-in.x72-in. " 2 "	429 "	5.72⅓	4.50	5.40	6.00
" " 3 "	357 "	8.93	....	8.00	9.00
66-in.x69-in. " 2 "	676 "	5.35	4.00	5.35	5.50
Manhole, No. 1	1	134.80	12.00	61.00	100.00
" No. 2	1	178.87	15.00	100.00	120.00
" No. 3	1	456.70	40.00	240.00	350.00
" No. 4	1	597.19	75.00	320.00	420.00
" No. 5	1	495.11	60.00	265.00	350.00
" No. 6	1	352.56	35.00	250.00	230.00
" No. 7	1	199.28	30.00	195.00	125.00
" No. 8	1	178.87	35.00	110.00	120.00
" No. 9	1	189.01	35.00	110.00	125.00
" No. 10	1	250.37	35.00	140.00	160.00
" No. 11	1	250.37	35.00	142.00	75.00
Excavation for sewage diverter	85 cu. yds.	5.00	2.50	1.30	2.00
Concrete walls and piers	44 "	8.50	15.03	9.00	12.00
Cement top	10 sq. yds.	.50	3.00	.90	1.00
16-in. cast-iron pipe	4 tons.	40.00	.03½	60.00	150.00
Drop manhole, Blackford & Hampton.	1	243.00	100.00	430.00	625.00
" " " Wiehl	1	243.00	100.00	375.00	575.00
24-in. circular brick sewer, 3-rings	22 ft.	4.05	8.00	6.40	10.00
24-in. pipe, East End Ave.	34 "	6.85	4.00	8.00	10.00
Concrete filling around pipe	3 cu. yds.	24.00	25.00	10.00	12.00
12-in. pipe sewer, 6 to 8 ft.	1,336 ft.	.62½	2.10	.37	.95
12-in. " " 8 to 10 ft.	184 "	.71	2.25	.95	1.10
15-in. " " 6 to 8 ft.	335 "	.80	2.00	.90	1.20
15-in. " " 8 to 10 ft.	288 "	.86	2.50	1.10	1.35
18-in. " " 6 to 8 ft.	470 "	1.08	2.30	1.40	1.60
18-in. " " 8 to 10 ft.	666 "	1.20	2.70	1.55	1.75
20-in. " " 6 to 8 ft.	334 "	1.24	2.60	1.75	1.85
20-in. " " 8 to 10 ft.	1,622 "	1.35	3.50	2.00	2.05
20-in. " " 10 to 12 ft.	130 "	1.68	4.00	2.10	2.25
20-in. " " 12 to 14 ft.	110 "	1.79	4.40	2.30	2.45
Junction manholes, 8 ft.	5	70.07	20.00	48.00	60.00
" " 10 ft.	8	82.94	28.00	55.00	70.00
" " 12 ft.	2	95.00	30.00	65.00	80.00
For each additional foot in height of manhole	5	7.42	20.00	5.35	6.00
Rock excavation, pipe trenches	10 cu. yds.	2.25	25.00	3.00	5.00
Sewer District No. 4.					
20-in.x30-in. egg-shaped brick sewer	312 ft.	2.47	4.00	2.30	4.00
10-in. pipe sewer 6 to 8 ft.	400 "	.43	2.00	.60	.90
12-in. " " under 6 ft.	415 "	.53	2.00	.75	.90
12-in. " " 6 to 8 ft.	874 "	.62½	2.10	.78	.95
12-in. " " 8 to 10 ft.	2,144 "	.71	2.25	.98	1.10
12-in. " " 10 to 12 ft.	190 "	.76	2.50	1.00	1.25
12-in. " " 12 to 14 ft.	55 "	.89	3.00	1.20	1.40
15-in. " " 8 to 10 ft.	496 "	.89	2.50	1.25	1.35
Manholes, 6 ft. in depth	2	59.33	20.00	43.00	60.00
" 8 "	6	72.82	25.00	48.00	70.00
" 10 " (A)	2	78.90	30.00	55.00	80.00
" 8 " (C. B. D.)	2	70.07	15.00	48.00	60.00
" 10 " (C. B. D.)	4	82.94	18.00	55.00	70.00
Rock excavation	5 cu. yds.	2.25	20.00	3.00	5.00
Sewer District, No. 6.					
10-in. pipe sewer, 6 ft. and under	870 ft.	.41	2.75	.50	.85
" " 6 ft. to 8 ft.	1,568 "	.43	2.00	.58	.90
" " 8 ft. to 10 ft.	2,146 "	.62	2.25	.68	1.00
12-in. " " under 6 ft.	1,026 "	.48½	2.00	.65	.90
12-in. " " 6 ft. to 8 ft.	322 "	.62½	2.10	.70	.95
12-in. " " 8 ft. to 10 ft	.....	.71	2.25	.85	1.10
15-in. " " under 6 ft.	183 ft.	.69½	1.80	.85	1.00
15-in. " " 6 ft. to 8 ft.	138 "	.75½	9.00	.95	1.20
15-in. " " 8 ft. to 10 ft.	321 "	.91½	2.70	1.05	1.35
Junction Manholes, 8 ft.	1	68.42	20.00	48.00	70.00
" " 10 ft.	1	85.96	25.00	55.00	80.00
(C. B. D.) " 6 ft.	8	56.59	15.00	43.00	60.00
(C. B. D.) " 8 ft.	6	70.05	18.00	48.00	70.00
(C. B. D.) " 10 ft.	4	82.94	20.00	55.00	80.00
Cu. yds. rock excavation	5	2.25	5.00	3.00	5.00
Sewer District No. 10.					
10-in. pipe sewer, 8 to 10 ft.	240 ft.	.73	2.25	.75	1.00
12-in. " " 6 to 8 ft.	405 "	.62½	2.10	.80	.95
12-in. " " 8 to 10 ft.	133 "	.71	2.25	.90	1.10
12-in. " " 10 to 12 ft.	150 "	.76	2.25	1.10	1.50
15-in. " " under 6 ft.	180 "	.69½	1.80	.95	1.00
15-in. " " 6 to 8 ft.	63 "	.75½	2.00	1.00	1.20
18-in. " " 6 to 8 ft.	240 "	1.07	2.30	1.40	1.60
18-in. " " 8 to 10 ft.	134 "	1.15	2.70	1.50	1.79
20-in. " " 6 to 8 ft.	864 "	1.20	2.60	1.65	1.85
20-in. " " 8 to 10 ft.	150 "	1.28	3.00	1.80	2.05
24-in. " " 6 to 8 ft.	137 "	1.61½	3.00	2.30	2.40
24-in. " " 8 to 10 ft.	80 "	1.68	3.40	2.65	2.75
24-in. " " 10 to 12 ft.	20 "	2.05	3.80	2.75	3.00
30-in. circular brick sewer	1,002 "	1.76	2.00	1.65	3.00
Manhole, 30-in. brick sewer, 6 ft.	1	56.69	15.00	43.00	40.00
" " " " 10 to 12 ft.	1	95.04	20.00	60.00	75.00
" " " " 12 to 14 ft.	1	108.79	22.00	68.00	85.00
" Class "A," 6 ft.	2	59.34	20.00	43.00	60.00
" " "A," 8 ft.	8	72.82	25.00	48.00	70.00
" " "A," 10 ft.	2	85.80	30.00	55.00	80.00
" " "C," 6 ft.	2	59.34	15.00	43.00	60.00
Rock excavation	160 cu. yds.	2.25	25.00	3.00	5.00
Earth " 30 in. sewer	1,666 "	.45	15.00	.50	1.20
Rock " 30 in. "	5 "	2.25	25.00	3.00	5.00
Excavation, sewage diverter	32 "	5.00	5.00	1.35	2.00
Concrete, walls, etc.	8 "	8.50	10.00	8.00	12.00
Cement, top	5 sq. yds.	.50	3.00	.80	1.00
16-in. cast iron pipe	1.5 tons	40.00	.02½	80.00	200.00
Specials	235 lbs.	.04½	.03	.15	.10
30-in. ¼ bends	2,710 "	.05	.25	.06	.10
Totals		$736,545	$167,560	$74,704	$99,560

SAND, CEMENT, ETC.—Washington, D. C.—Bids are asked by Bureau Supplies and Accounts, Navy Department, until 10 a. m., Dec. 5, for furnishing at naval station, Guantanamo Bay, Cuba, under schedule 237, a quantity of sand, Portland cement, bolts, washers, etc., doors and windows, Coburn door hangers, yellow pine, steel posts and girders, steel rods, expanded metal, rubberoid roofing, wrought iron or steel pipe, pipe fittings.

PIPE GALLERY.—New York, N. Y.—Following bids were opened Nov. 14 by Board of Health, Thomas Darlington, Pres., for material and labor for construction of an underground pipe gallery at Kingston Ave. Hospital, Kingston Ave. and Fenimore St., Brooklyn: Blake & Williams, 211 West 20th St., $29,659; Jas. McArthur, 22 Ormond Pl., Brooklyn, $21,000; Russell Cont. Co., 156 Fifth Ave., $24,852; Chas. Meads Co., 299 Broadway, $26,660; A. S. Traub, 215 West 125th St., $23,890.

WIRELESS TELEGRAPH.—Washington, D. C.—An open market call for wireless telegraph apparatus has been sent out. Purchase is to take place Nov. 18 at Paymaster's Office, Navy Department, Washington, D. C. Ten sets of apparatus are desired, each set to include one complete sending and two complete receiving outfits and to consist of all parts necessary for the successful operation of the same except antennae, ground plates and low potential generator. A copy of the specifications may be seen at office of Engineering News, 220 Broadway, New York.

GRADING.—Portsmouth, N. H.—Following bids were opened Nov. 11 by Bureau Yards and Docks, Washington, D. C., for grading at Navy Yard, Portsmouth: (1) bid for removal of 8,470 cu. yds. rock and 10,430 cu. yds. earth, (2) bid for removal of 11,460 cu. yds. rock and 13,325 cu. yds. earth: Boston & New York Contracting Co., 220 Devonshire St., Boston, Mass., (1) $14,532, (2) $18,939;

*BRIDGE WORK, ETC.—Denver, Colo.—Following bids were opened Nov. 8 at Denver Office, U. S. Reclamation Service, C. E. Wells, Supervising Engr.; J. H. Quinton, Supervising Engr.; Jno. E. Field, Dis. Engr., for structures for North Platte Project, Nebraska, Interstate Canal; (1) W. O. Morrison, Denver, Colo.; (2) Guy F. Atkinson, Colorado Springs, Colo.; (3) Robinson & Maney, St. Louis, Mo.; (4) Lyn S. Atkinson, Colorado Springs, Colo.:

Bids received at Denver, Col., November 8, 1905, by U. S. Reclamation Service, for Structures for North Platte Project, Neb., Interstate Canal.

Items.	Quantities.	(1)	(2)	(3)
Schedule No. 1.				
Concrete, Class 1	570 cu. yds.	$5.30	$7.00	$11.00
" Class 2	430 "	10.30	10.00	15.00
" Class 1, in floor and side walls of flood water intake	1,800 "	5.10	6.00	11.00
Steel for reinforcing	28,000 lbs.	.0275	.05	.0475
I-Beams	9,000 "	.0375	.05	.045
Clinton wire fabrics	600 "	.099	.10	.06
Lattice girders	5,000 "	.058	.06	.05
Puddle	80 cu. yds.	1.20	2.00	1.50
Grouted paving	40 "	5.50	4.00	5.00
Riprap or dry rock paving	200 "	4.30	4.00	4.00
Screened gravel for boulders	100 "	1.30	2.00	3.00
Excavation, Class 1	6,000 "	.38	.40	.50
" Class 4	400 "	5.00	4.00	2.00
Common lumber	5 M. ft. B. M.	34.00	50.00	45.00
Equivalent to overhaul, hauled feet at .015 per cu. yd.	1,000 cu. yds.	15.00	15.00	15.00
Totals, for schedule No. 1		$27,070	$31,730	$44,646
Schedule No. 2.				
Concrete, Class 1	4,200 cu. yds.	$6.60	$8.00	$11.00
" Class 2	2,700 "	10.90	11.60	15.00
Steel for reinforcing	285,000 lbs.	.0327	.04	.0475
Kahn bars for reinforcing	120,000 "	.0458	.045	.04
Lattice girders	27,000 "	.055	.06	.05
Clifton fabric or equivalent	15,000 "	.099	.10	.06
Grouted paving	200 cu. yds.	5.25	5.00	5.00
Riprap or dry rock paving	200 "	4.30	4.00	4.00
Gravel boulder backing for concrete lining	900 "	2.30	2.00	5.00
Screened gravel and boulders	3,000 "	2.20	2.50	4.00
Puddle	1,500 "	1.25	1.50	1.50
Excavation, Class 1	15,000 "	.36	.60	.30
" " 2	100 "	.72	1.25	2.00
" " 3	100 "	1.25	4.00	2.00
" " 4	100 "	4.00	2.00	2.50
Common lumber	5 M. ft., B.M.	36.00	40.00	45.00
Overhaul equivalent, hauled 100 ft., .015 cu. yd.	1,000 cu. yds.	1.015	.015	.015
Highway bridges, 66-ft. spans	8	1,018.00	1,150.00	1,250.00
" " 60-ft. "	2	980.00	1,050.00	1,200.00
Totals, for schedule No. 2		$103,605	$119,430	$145,627

American Truck Co., Wentworth St., Kittery, Me., (1) $23,198, (2) $30,915; James H. Ferguson, 22 Parkman St., Dorchester, Mass., (1) $18,245, (2) $24,232; Hervey A. Hanscom, 53 State St., Boston, Mass., (1) $18,900, (2) $24,785; T. H. Gill & Co., 88 Broad St., Boston, Mass., (1) $17,900, (2) $21,230; O'Brien & Hoolihan Contracting Co., 1722 Park St., Syracuse, N. Y., (1) $19,915, (2) $26,393; John J. Fitzpatrick, 29 Hamilton St., Plattsburg, N. Y., (1) $17,633, (2) $23,499.

JETTY WORK.—Washington, D. C.—No contract will be let for the construction of a jetty at Carter's Creek, Va. U. S. Engineer's office has decided to construct the jetty itself by the use of day labor. Bids for the work were opened Nov. 1 by Lt. Col. R. L. Hoxie, U. S. Engrs. Work includes 1,100 cu. yds. oyster shell hearting and 1,000 cu. yds. quarry stone or concrete block covering.

LAMPS, GENERATOR, ETC.—Washington, D. C.—Bids are asked by Bureau Supplies and Accounts, Navy Department, until 10 a. m., Dec. 12, for furnishing a quantity of naval supplies, among which are the following: Schedule 230, arc lamps, electrical supplies; schedule 231, storage battery outfit, generator set, transformers; schedule 233, motor; schedule 234, bolts, nuts, shovels, etc.

INDUSTRIAL NOTES.

THE RAILROAD SUPPLY CO., of Chicago and New York, reports an increase in the sale of "tinned" Chicago channel pins for track bonding. It is claimed that channel pins made under the company's special tin coating process are driven easier and quicker, and at the same time make a better and more permanent contact between the rail and the bond wire.

THE SCHERZER ROLLING - LIFT BRIDGE CO., 16 Monadnock Block, Chicago, has issued a list of some of the bascule bridges built and under construction. The railway bridges are 23 in number, of which 11 have double track, six have four tracks, three have six tracks and one each have one, three and eight tracks. Besides these, more than 40 bridges have been built for electric railways, most of which have two or more tracks, and there are a large number of highway bridges. Of the steam railway bridges, four have been built for foreign countries; in England, Ireland, Holland and Brazil, respectively.

JOSEPH M. ROMAN CO., of New York City, engaged in the design and construction of electrical and power propositions, announce that they have opened offices in Atlanta, Ga., in order to follow more closely their work in the South. Mr. R. W. Hutchinson, Jr., a native Southerner and a close student of and author of several books on power development, transmission and application enters the firm. The firm, which holds contracts for several plants now in course of construction, has just completed some electrical transmission work for the U. S. Government. The firm wishes to receive catalogues and price lists for the files of its Southern office.

THE PELTON WATER-WHEEL CO., of San Francisco and New York, reports that it has closed contract with the Oro Water, Light & Power Co., of Oroville, Cal, which covers two complete Pelton units of 2,000 HP. each, direct-connected to electric generators, the wheels operating under 465 ft. head. The water wheel arrangement embraces the double-overhung type of construction, which is typical of Pelton apparatus, especially in connection with engine type generators, forming a compact and self contained unit. Sturgess governors will be employed, the requirements in this regard being exceedingly severe, as the current is to be used for both light and power, and the latter involves the operation of gold dredges in which the fluctuations of power and load are very sudden and heavy. Among other recent orders is a wheel equipment from the Crown Columbia, Paper & Pulp Co., consisting of a triple Pelton unit for direct connection to heavy pulp grinders in the paper mills; the wheels are mounted upon a steel shaft 18 ft. in length, provided with an oil thrust bearing of special design. Takata & Co. have ordered a 390-HP. unit for Tokio, and a large wheel has just been furnished the Ingersoll-Sergeant Drill Co. for direct connection to a compressor. Owing to the growth of its business, the Pelton Water-Wheel Co. will enlarge its works, and has purchased a block of land in South San Francisco, where a machine shop is now under course of construction. This new shop will be equipped with the latest high grade tools and handling devices, and it is expected to be a model of its kind, affording exceptional facilities for the construction of high grade apparatus.

THE WESTINGHOUSE MACHINE CO., East Pittsburg, has booked many orders from foreign countries. Some of the important steam engine orders follow: One 16 and 34 × 16-in. marine type vertical cross compound engine for the Kure Arsenal, Japan; four 16 and 34 × 16-in. marine type and two 8½ × 8-in. standard steam engines for the Tehauntepec Ry., of Mexico; one 11 and 19 × 11-in. compound steam engine for the Furukawa Western Bureau, Japan; on the 13½ × 12-in. standard steam engine for the Hokkaido Tanko Ry. Co., of Japan; two 10 and 18 × 10-in. compound steam engines for the Kuiskiu Railway of Japan; one 14 and 24 × 14-in. compound steam engine for the Imperial Printing Office of Japan; one 9 and 16 × 9-in. compound steam engine for Graham Bros., Stockholm, Sweden; one 18 × 16-in. compound steam engine for the Rio de Janeiro Tramway Light & Power Co., of Brazil, and one 18 × 16-in. standard steam engine for the Santa Cecelia Sugar Co. of Cuba.

WILLIAM GLASMANN, Mayor of Ogden, Utah, has been elected chairman of a committee formed for the purpose of bringing the manufacturing advantages of Ogden to the attention of those who are looking for a promising location. He sets forth among the advantages of that location that it is only 40 miles from deposits of steam coal and 150 miles from deposits of coking coal, while iron ore is found in abundance within 30 miles. The city has already in operation a sugar beet factory of 400 tons daily capacity, 11 canning factories, the largest railroad machine shops between the Missouri River and the Pacific Ocean and a number of other enterprises. The locality has an abundance of pure water, which is a great advantage in that part of the country. It enjoys a location on four railroads: namely, the Southern Pacific, the Union Pacific, the Denver & Rio Grande and the Oregon Short Line. In railroad parlance it is a common point and rates are quoted on all these lines with that consideration in view. The city has a population of 25,000 and serves as the distributing center for a very large territory. The population within a radius of 500 miles is over 300,000. The committee is offering inducements for the location of factories, and a strong effort will be made to secure such as seem to offer substantial possibilities and at the same time propose to engage in lines which meet the business requirements of that part of the country.

TRADE PUBLICATIONS.

TRIPLEX PUMPS.—Rumsey & Co., Ltd., Seneca Falls, N. Y. Paper; 3½ × 6½ ins.; pp. 20; illustrated.

Tabular descriptions accompany illustrations of different styles of triplex pumps.

PUMPS.—Flint & Walling Mfg. Co., Kendallville, Ind. Card; 9¼ × 4¼ ins.; illustrated.

Hand and windmill pumps are shown, and windmills, tanks, towers, etc., are also mentioned.

CENTURY CEMENT TOOLS FOR FINISHING CEMENT WALKS AND CURBING.—The Century Cement Machine Co., 181-183 West Main St., Rochester, N. Y.

This little pamphlet illustrates the cement tools used in finishing concrete sidewalks, curbs, etc.

DUMP WAGONS AND ELEVATING GRADERS.—National Drill & Mfg. Co., New York and Chicago. 6-page folder, 5⅛ × 3 ins.

The merits of the National dump wagon and the National elevating grader are briefly set forth, photographs being given of each.

BRICK MACHINERY.—Scott Mfg. Co., 609 Commonwealth Trust Building, St. Louis, Mo. Paper; 8 × 9½ ins.; pp. 8; illustrated.

The Andrus improved four mold press is described and illustrated; also the Scott clay pulverizers, mixers, dry pans, and elevators.

ROCK DRILLS.—The Ingersoll-Sergeant Drill Co., 11 Broadway, New York. 5½ × 3¼ ins.; pp. 12.

This little pamphlet contains illustrations and brief descriptions in the text, of a number of the different types of rock drill made by the Ingersoll-Sergeant Drill Co.; also air compressors and channelers.

PAINT FOR STRUCTURAL AND MANUFACTURING PURPOSES.—The Lowe Brothers Co., Dayton, O. Paper; 5 × 9 ins.; pp. 12; illustrated.

The qualities of good paints are summarized, paints for various purposes are described and sample cards are given. The illustrations include a number of bridges.

PUMPING MACHINERY.—The Deming Co., Salem, O. Paper; 6 × 9 ins.; pp. 109; illustrated.

Text and tabular descriptions are given of a large variety of single and double acting triplex pumps, deep well pump heads and pumping engines, and centrifugal pumps. Various accessories, artesian well cylinders, etc., are listed.

UNDERGROUND CONDUITS AND THIRD RAIL INSULATORS.—Standard Vitrified Conduit Co., 39 Cortlandt St., New York.

Vitrified conduits for underground wiring purposes are shown and data given as to weights, dimensions, etc., for single and multiple ducts. The catalogue also contains a description of the Manhattan third rail insulators, and letters of recommendation.

PUMPING BY COMPRESSED AIR.—The W. G. Leale Co., 119 Mission St., San Francisco, Cal. Paper; two pamphlets, 5½ × 8 ins., and 4 × 8¾ ins.; pp. 36 each; both illustrated.

The Starrett system is adapted for pumping from wells, mines, etc., or to the tops of towers and high buildings. It does not require any submergence, and can raise water through a lift of 500 ft. with an air pressure of only 40 lbs. A number of testimonials are given.

CONCENTRATORS.—Allis-Chalmers Co., Milwaukee, Wis. Stiff paper; 8 × 10½ ins.; pp. 24.

The design of the Overstrom table for concentrated ores is illustrated by photographs and line drawings, and instructions for erecting and operating the concentrator are given. Photographs also show interiors of a number of mills equipped with these concentrators. The advantages of the Overstrom table are set forth in detail.

GOLD MILLING MACHINERY.—Allis-Chalmers Co., Milwaukee, Wis. Stiff paper; 8 × 10¼ ins.; pp. 44.

This catalogue is really a reprint of a paper by Professor H. O. Hoffman, read before the American Institute of Mining Engineers. The paper is an excellent one, containing, as it does, a great amount of valuable data of actual work done in a number of gold mills in the Black Hills, giving in detail the cost of the work and a number of drawings showing the design of the mills and the character of the machinery used.

GAS PRODUCERS.—The Morgan Construction Co., Worcester, Mass. Stiff paper; 6 × 9 ins.; pp. 50.

The Morgan continuous gas producer is very fully illustrated and described in the pages of this catalogue, and data are given as to the efficiency of the producer, taken from actual tests. Photographs show a number of interesting plants installed in various parts of the country, and a long list of users of the producer is given. The advantages of gas firing are set forth, and the uses of producer gas are briefly enumerated. The catalogue as a whole forms a very useful compendium of information on producer gas.

CONCRETE BLOCKS.—Ideal Concrete Machinery Co., South Bend, Ind. Circulars; 10 × 8 ins.; illustrated.

One of these circulars shows the sections of a great number of plain and special blocks for building construction; the others show elevations of walls and porch piers built with blocks of different face patterns.

ROCK ASPHALT FOR TOP DRESSING MACADAM.—The Wadsworth Stone & Paving Co., 405 Bessemer Building, Pittsburg, Pa. Paper; 6¼ × 5¼ ins.; pp. 13; illustrated.

Kentucky rock asphalt is used as a top dressing for macadam, being rolled without heating. The pamphlet tells how to use the rock asphalt and gives instances of its use.

JIGS AND FURNACES.—Allis-Chalmers Co., Milwaukee, Wis. Paper; two pamphlets, 8 × 10½ ins.; pp. 12 and 4; both illustrated.

The larger pamphlet deals with the Hancock jig for ore concentration, describing the machine itself, with its operation and its advantages. The smaller pamphlet describes the McDougall furnace for roasting heavy sulphide ores.

GAS AND GASOLINE ENGINES.—Olds Gasoline Engine Works, Lansing, Mich. Paper; 9¼ × 6 ins.; pp. 32; illustrated.

The construction of the Olds horizontal engine is described, and particulars are given of engines of 2 to 50 HP. Some of the illustrations show the engines employed for driving pumps and other machinery, either belted or direct connected.

LARGE WATER METERS.—National Meter Co., 84 Chambers St., New York. Stiff paper; 6 × 9 ins.; pp. 28; illustrated.

The Premier meter consists of a Venturi tube, fitted with a by-pass and a second and smaller Venturi tube, provided with a joint recording apparatus. Besides general descriptive matter this pamphlet contains a reprint of an article on the meter, first published in Engineering News, of May 19, 1904, and also a reprint of an article in another journal describing a test of a 30-in. Premier meter, together with the meter testing plant of the National Meter Co.

COMMERCIAL EXAMINATION OF FUEL.—Waller & Renaud, 159 Front St., New York City. Paper; 3 × 6 ins.; pp. 12.

Messrs. Elwyn Waller and H. Stanley Renaud, composing the above-named partnership for chemical analyses and assaying, wrote an article on the above-named subject which was printed in the "Black Diamond" of Aug. 20, 1905, and is here reprinted. The article outlines briefly the general object, method and value of fuel analysis.

STORAGE BATTERIES.—National Battery Co., Buffalo, N. Y. Two pamphlets. Paper; 7¾ x 10½ ins.; pp. 8; illustrated. Also circulars.

The storage battery equipments of the Frontier Telephone Co., at Buffalo, and the Syracuse & Suburban Ry., at Syracuse, N. Y., are described and illustrated in the two pamphlets, the latter plant being for the purpose of voltage regulation. The various circulars describe the different plates, batteries, etc., with prices and other information.

PORTLAND CEMENT.—Illinois Steel Co. (Cement Department), Rookery Building, Chicago. Paper; 6 × 9 ins.; pp. 61; illustrated.

The results of various tests of the Universal cement are given, as well as lists of users and testimonials from engineers and contractors; also the cement specifications of the American Society for Testing Materials and the U. S. Engineers. The greater part of the pamphlet, however, is devoted to excellent half-tone engravings of bridges, buildings, sewers, etc., in the construction of which this cement has been used.

HOISTING AND CONVEYING APPLIANCES.—The Brown Hoisting and Conveying Machinery Co., Cleveland, O. Cloth; 12 × 9 ins., pp. 198; finely illustrated.

Such a trade publication as the one before us merits unusual attention on the part of the reviewer. The book might be called a treatise on up-to-date machines for hoisting and conveying materials in bulk; but such a description would be inaccurate, for the book does not claim to be a treatise written from an independent point of view. It is published to show what a firm of engineers and manufacturers of international reputation has done to advance the art in this particular field; and it is a fact that this firm has done so much that the record of its work is an indispensable part of the history of this art.

But we do not think that the mere words "Hoisting and Conveying" carry all the meaning they ought, even to the engineer. We have to go back and reflect that the cost of transportation, by rail or water, has been so enormously reduced during the past half century that the cost of loading and unloading had to be reduced also. It seems like a simple matter to take a ton of coal or ore out of the hold of a vessel and place it on a wharf or on board a railway car just alongside. It was a simple matter when the vessel was a little 100-ton sail-boat. Transportation cost so much anyway that the additional cost of shoveling by hand out of the hold and lifting by a horse whim was no great matter. But with a 10,000 ton vessel at the wharf ready to deliver a load which will make a huge artificial hill when placed on land, the man with a shovel and the horse-whim are out of the question.

To take another comparison: In the days of small ships and hand riveting anything was good enough to hoist the plates and shapes into place to form a vessel's hull. But in these days when the hull of a modern freight steamer, on the ways, towers fifty feet in the air, we must have the aid of steam and electricity to carry the heavy plates from the punching shop to their place in the hull. It is commonly supposed that Americans do not know much about ship building compared with our English cousins; but the book before us shows Brown electric cantilever ship cranes serving vessels on the stocks in Belfast, Ireland, Newcastle, England, and Trieste, Austria.

There has been a necessary evolution, too, in the appliances for grappling material to be hoisted. The hand shovel propelled by human muscle was all right for loading wheel-barrows or dump carts, or even the small buckets used when horse-power and later steam-power was first applied to hoisting. It was not long, however, before the principle of the grappling dredge or clam-shell bucket—used where human shovelers could not work—was applied to so-called automatic shovels for handling coal. Next these shovels were so improved that they would work not only on the easily penetrated coal, but on the much more intractable heaps of iron ore. Then a way was found to make a single shovel or scoop fill itself in this difficult material, and these are now made so large that they will carry as much as 150 cu. ft. of ore at a time.

We may not take more space to trace the interesting course of evolution in this field. The book before us will certainly interest and be found useful by every engineer practically concerned with any sort of hoisting and conveying work, particularly where materials are handled in bulk.

For other Proposal Advertisements see pages 43, 44, 45, 46, 47, 48, of Advertisements and Construction News page 172.

WATER-WORKS.

Perry, Fla.

Sealed proposals, on blank forms furnished by the Town and addressed to "The Mayor and Board of Councilmen, Perry, Florida," will be received until 2 P. M. on Nov. 28th, 1905, for furnishing all material and labor for the construction of a system of Water-Works at Perry, Fla., as per plans and specifications adopted by them, as follows:

Furnishing F. O. B. cars Perry, Fla.

(1) Approximately 191 tons of 8, 6, and 4-inch Cast-Iron Pipe and 4½ tons Special Castings, as shown.

(2) 34 Fire Hydrants, 20 Valves and 20 Valve Boxes.

(3) Furnishing and Erecting one Steel Tower and Tank.

(4) Building Complete Foundations for Tower and Tank.

(5) Laying Pipe.

Bids will be received for the whole of the above work, and each bid must be accompanied by a certified check for not less than Five Hundred Dollars ($500.00).

The right is reserved to reject any and all bids.

Plans and specifications can be seen at the Town Clerk's office at Perry, Fla. For specifications and other information address the Engineer at Quitman, Ga.

W. F. HENDRY, Mayor.
J. O. CULPEPPER, Clerk.
H. S. JAUDON, Engineer,
Quitman, Ga. 20-2t

U. S. ENGINEER OFFICE, Army Building, New York, November 16, 1905.—Sealed proposals for riprap jetty at Mattituck Harbor, riprap breakwater at Sag Harbor, and for dredging in Bronx River and East Chester Creek, N. Y., will be received here until 12 M., December 6, 1905, and then publicly opened. Information furnished on application. W. R. LIVERMORE, Col., Engrs. 20-3t

SEWERAGE AND SEWAGE DISPOSAL.

Bristol, Pa.

Bids will be received on [illegible] 20, 1905, for a separate system of sew[illegible] and a sewerage disposal plant at Bristol, Pa.

Bidders are required to visit Bristol and submit general plans with their bids.

The Borough reserves the right to reject any and all bids.

STREET COMMITTEE OF BOROUGH,
20-2t Joseph R. Gr[illegible], Chairman.

BOILER.

Asbury Park, N. J.

Sealed proposals, addressed to the undersigned, will be received by the Common Council of the City of Asbury Park, New Jersey, up to 12 o'clock noon, Monday, November 27, 1905, for the [illegible] and erection of a 200-HP. internal [illegible] tubular boiler.

Specifications furnished upon application.

Council reserves the right to reject any or all bids. JOHN L. C[illegible]N,
Supt. Dept. of Water and Sewers.
711 Asbury Ave., Asbury Park, N. J.
Nov. 14, 1905. 20-2t

SITUATIONS OPEN

CONTRACTORS' ENGINEER wanted to give all lines and levels on building operations. Must be competent to estimate quantities from plans. Give references, former employers and salary expected. Address 'R. A. 20," Engineering News, New York. 20-1t

WANTED.—Draftsman for general railroad work; will last two years; salary, $90. Apply 500 East New York Ave., Brooklyn. 20-1t

SUPERINTENDENT WANTED for small structural shop, in New York City, where work of all kinds is done. Must be capable and resourceful. Address 'S. A. 20," Engineering News, New York. 20-1t

Exchange or Sell Cheap

2 Civil Engineers' Transits and Tripods.
1 Civil Engineers' "Y" Level and Tripods.
2 Flag Poles. 1 Level Rod.
100-foot Steel Tapes. 50-foot Cloth Tapes, and lot of supplies.

Prefer diamonds or cash. 20-1t

Address, "A 20," Engineering News, New York

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8,000 feet 2-inch Spruce Plank 16 feet long, and 2,000 feet 6x8 20 feet long

13 Park Row, Room 928. Tel., 2380 Cortlandt
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